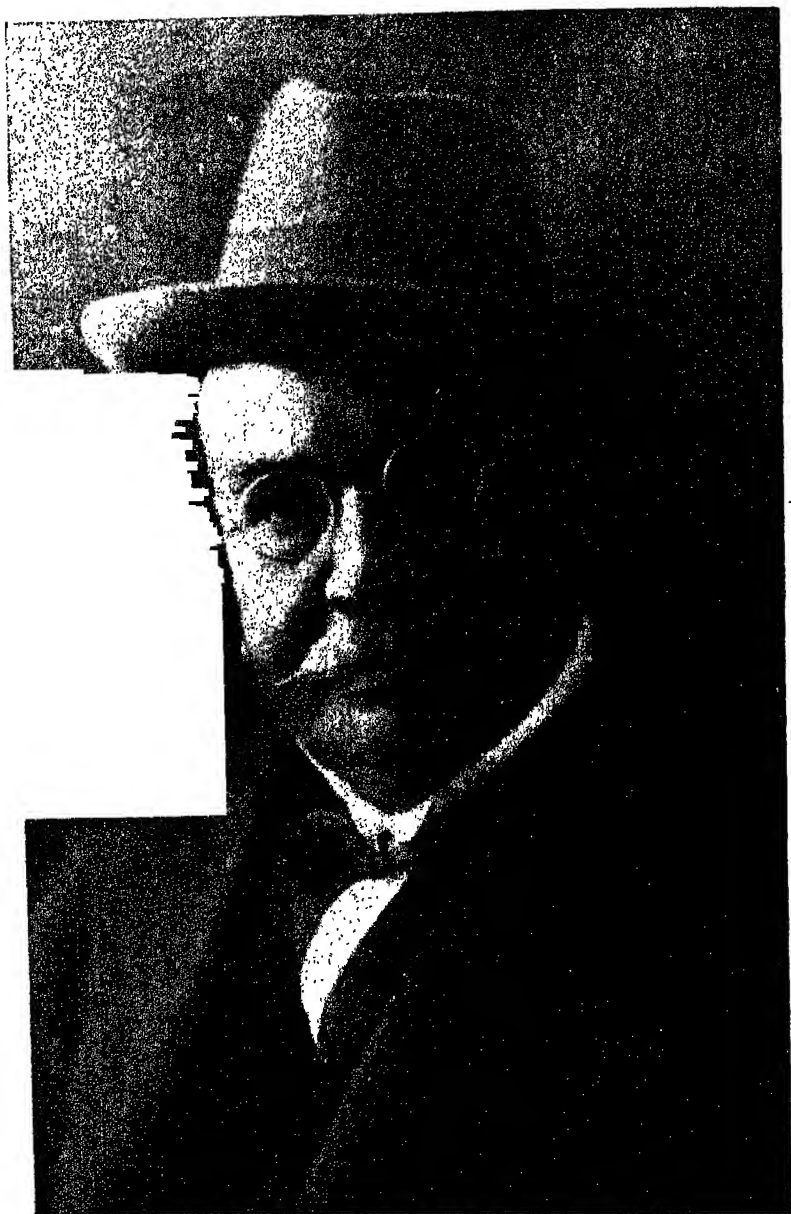


HARVEST FROM THE DESERT



SIR GANGA RAM

HARVEST FROM THE DESERT

THE LIFE AND WORK OF SIR GANGA RAM

by

B. P. L. BEDI

With Illustrations

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THE WRITER'S WORD

"THE Italian poet Ariosto imagined, with some allegorical vagueness, that at the end of every man's thread of life there hung a medal stamped with his name, and that, as Death severed life's thread with its fatal shears, Time seized the medal and dropped it into the River of Lethe. Yet a few, a very few, of the stamped medals were caught as they fell towards the waters of oblivion by swans, who carried off the medals and deposited them in the museum of immortality. Ariosto's swans are biographers. By what motive " asks Sydney Lee, "are they impelled to rescue these medals of personality from the flood of forgetfulness, into which the mass sink ? "

Similar was the question with which I was faced when I was asked by Sir Ganga Ram Trust Society to undertake the writing of Sir Ganga Ram's Life. From our very childhood we, who have lived in the Punjab, have heard the name of Sir Ganga Ram mentioned not in one but in many connections.....as a distinguished engineer, as a brilliant farmer, and as a warm-hearted philanthrope. On closer examination I found that his was a career which was in perfect conformity with the classic definition of a fit biographic theme—"serious, complete, and of a certain magnitude."

Thus I had no difficulty in accepting the invitation of the Trust. To-day, when I have finished my narrative, I feel that it has been my privilege to depict a personality which was rich with the fullness of life, its experience, its joys and sorrows. Sir Ganga Ram had a powerful brain combined with dynamic energy, and in him was that rare combination of the visionary and the lover of detail and hard work.

He had a rare gift of sensing the completeness of things, and he gave many a remarkable instance of it. One day in 1925 Mr. M. C. Mohan came to Sir Ganga Ram with the proposal that his biography might be written, and added to the Library which he had founded, together with a framed portrait for the wall. His reply was typical: "I am not for these. These things are to be considered after death—not in my life." He was right for "death is a part of life, and no man is a fit subject for biography till he is dead, because death withholds the finishing touch."

Ganga Ram will go down to history as a great Indian. The story of his life is the story of a man who by birth was at the bottom of the ladder of success, and by his own patient and persistent effort, his idealism and love of work, succeeded in reaching the very top. Engineering with him was a matter of feeling, not simply a matter of figures. It came to him with that instinctive spontaneity which comes from love and understanding. And agriculture to

him was also a matter of feeling—and a matter of faith. His unshakeable belief in the possibilities of a farm, and the profits it could yield, urged him on to great and successful experiments on his own farm at Gangapur, and later on, this belief was his inspiration when developing the waste land of the Punjab and reaping a "harvest from the desert." He was a true son of the soil, and few have loved Mother Earth more than he did.

In the "difficult art of giving" he seemed endowed with a natural gift—perhaps because he never gave for show, or to unburden his conscience, but out of the pity and tenderness of his heart. The warm-heartedness with which he gave lent charm to his charities, and since he always gave where the need was most urgent, they bore rich fruit even in his lifetime—in terms of human happiness.

He died in 1927, and it is well over a decade after his death that this biography appears. The writing of it has had a chequered history, and it finally came into my hands nearly two years ago. It was not an easy task, because material was scarce—I might almost say precious—there being nothing at all in the way of diaries, notes, or letters to guide me.

My own delay is bound up with my own work in the villages of the Punjab, and the many demands on my time that could not be refused. It is only this summer in the green stretches of the Kangra Valley that I have been able to find the time and undisturbed quiet necessary for its writing.

In conclusion, I must express my gratitude to Mr. M. C. Mohan, the Assistant Secretary of the Trust, who besides giving me great help in procuring the necessary documents furnished me also with an account of Sir Ganga Ram's charities which proved most useful as raw material. Acknowledgments are also due to *The Journal of Indian Engineering* to which I am indebted for very accurate and interesting descriptions of the agricultural and engineering projects which took up the major part of his life.

Particularly inspiring was the help given by Raja Jwala Parshad, his old friend and colleague, now Pro-Vice-Chancellor of the Benares University. Sir Ganga Ram can be congratulated on possessing a friend who had such a unique faculty for remembering details. He told of events which happened many long years ago with a freshness and accuracy of detail that brought them vividly before my eyes. His attractive way of telling a story and his evident enjoyment in remembering things that happened as long as thirty and forty years ago recreated for me the subject of this biography, and made him live again in my imagination.

It would be useless for me even to attempt to thank my wife. Every page bears the imprint of her inspiration, and the influence of her criticism... both of immeasurable value in the making of this book.

URUVELA

ANDRETTA, KANGRA VALLEY.

B. P. L. B.

" May our India
Our ancient land, unto herself return
O once again return to steadfast work,
To duty and devotion, to her trance
Of earnest meditation. Let us sit
Once more unruffled, greedless, strifeless, pure."

—*Rabindranath Tagore.*

CHAPTER I

CLOUDS AT SUNRISE

IN the 'forties of the nineteenth century a young couple were on their way to the Punjab. They carried with them nothing more than the bare necessities of a wayfarer: a few utensils for cooking, and a bundle of clothes.

These lonely travellers on the by-paths and mud roads of a deserted countryside were not ordinary mendicants. The man came from a comfortably settled agriculturist family in District Muzaffarnagar of the United Provinces; his wife was the daughter of a merchant, and had also enjoyed the blessings of a sheltered childhood under the roof of a father who could always count upon an adequate income.

At home, there was nothing normally given to a middle-class family which was denied them, and yet this couple had turned their backs on their village, and were trekking their way night and day to the far-off North.

"Once we cross the Sutlej, and let us pray to God Almighty that we do get across, we shall be able to breathe freely and eat our two morsels of

bread in peace." The man looked wistfully at the green fields around him, and the peaceful villages under their shady trees, and then at the dusty road, and the swirling river ahead, and he started singing, as though the mistrust and sorrow in his heart had to find some tune in which to drown itself. But the tune itself was sad, and repeated monotonously the one thought that was stirring within his tired head :

"Of what avail
the plough or sail
or land or life
if freedom fail?"

The freedom which these two wanted was neither freedom from the tyranny of the mother-in-law, nor from the fear of creditors, nor from the rapacity of Government officials, but freedom from the sword of those marauding hordes of Jat and Afghan horsemen who harried the plains of Hindostan like jackals. They were prowling everywhere, gnawing at the great carcase that used to be the Moghul Empire, and nobody's life or property was safe.

The might of the Empire was gone, but the shadow of the Emperor remained. The great heritage of the mighty Akbar had fallen to pieces, and outlying provinces had already been appropriated by Sikhs, Mahrattas, Rajputs, Afghans and the rest. Instead of "Ain-i-Akbari", Anarchy and Disorder held terrible sway over the land. Among the local

chiefs, the recognised cannon of social morality became "Everyone for himself, and the devil take the hindmost".

But, as always, it was the people of the land who suffered most from insecurity of life and property. Every village and every town was at the mercy of the freebooters. The districts round Delhi, being the last remnants of the Empire, were ready targets for their attacks, and they were always open to raids. The life of the people, by night and by day, was one long terror. No man at night knew whether he would see the morning sun. Women were to be guarded as more precious than jewels within the four-walls of their homes. For the very young and the very old there was no mercy when the robbers came. No power could stay their hands, and prayers could not ward off the unsheathed sword.

It was the freedom from the ravages of cold steel that the villagers pined for and prayed. And the mirage of security beyond the Sutlej had drawn Daulat Ram and his young wife from the warmth and comfort of the family hearth.

News came that the Sikh kingdom had fallen, and Ferangi Raj had been established in the Punjab. Here was the promise of something new, some indication of change, and the prospect, perhaps, of making a new way in life.

Daulat Ram was the youngest of four brothers, and he had inherited in full measure that spirit of adventure which moves younger sons all over the

world to seek new pastures in new places. The history of empire-building throughout the centuries has been the history of younger sons taking to new fields and bold enterprises.

Daulat Ram's decision to seek his fortune in the new land of the Punjab once again illustrated what history had established times without number. The journey was long and hard and they were exposed to considerable danger, but the drive of hope was urgent enough to sustain Daulat Ram on his way.



At last the two wayfarers reached the land of their dreams, and things worked out well. Daulat Ram with his straight figure and fine physique easily got a job as Junior Sub-Inspector in the Police Service of the new Government. His background of agricultural life, and his knowledge of Persian helped him a great deal in carrying out his new work efficiently. Added to these, the courage and self-confidence which his long and arduous journey had given him commanded respect from his subordinates, as well as from his masters. A tilt of the chin, and straight-gazing eyes were the outward signs of his victory.

At Mangatanwala, where Fate had settled them, a new chapter opened in the lives of the nomadic couple. There was home life once again, and rest for soul as well as body. Their long-thwarted desire for peace and security seemed to be fulfilled

at last, and a new light entered their lives.

On the one hand, Mangatanwala is situated about forty miles from Lahore, the capital of the Province. On the other, it is about fourteen miles distant from Nankana Sahib, the famous shrine of the Sikhs sanctified by its associations with Guru Nanak.

Strategically it stands on the road which formed the old Imperial highway of the Moghuls connecting Delhi, the heart of the Empire, with the far-flung outposts of the North-West.

Mangatanwala was, therefore, an important station, and the officials who were posted there basked in a reflected glory.

The Police Station was located, not in any ordinary building but in an old mud fort, which gave it more the appearance of a defence post than that of a mere local station. But, despite its dignified appearance, housing accommodation was very scanty, and Daulat Ram could not be accommodated within the four-walls of the mud fort. He looked round the neighbourhood to find a likely house for his family.

Not very far away flowed the Deg Nala in its winding bed, and on its banks stood an old shrine. In seclusion there lived a Sadhu, as monolithic in his calm as he was monosyllabic in his speech. He had lived in that place for long long years. He had seen people come and go, from the lowly untouchable to the great Maharaja, with as little

attention as he had witnessed the rise and fall of the Sikh kingdom, and with as much detachment as he had seen the Durrani hordes ride by, undisturbed and unmoved.

The young Police officer secretly began to cherish the idea of living near this old man. But the recluse maintained a forbidding reserve, and he did not dare to suggest it. So he began to visit the *Sadhu*, sitting quietly near him, and not speaking. Day after day he came and went away again without a word, as though the cool sound of the running water and the mere presence of the holy man were enough for him.

Meantime, his temporary stay at the Police station was coming to an end, and he was feeling apprehensive because no suitable house had been found. At last, one day, much to his delight, the *Sadhu* spoke to him gently: "Is there anything, my son, you want to say?"

"Nothing, *Babaji*," said Daulat Ram, "except that I want to live in the shadow of your feet."

"This is the abode of *Sadhus*," the *Baba* said, "and for ages past it has been so. Families cannot enter the four-walls of this shrine: no worldly sorrows and worldly joys disturb this home of peace."

The ripened wisdom of the ages seemed to speak with a tongue as old as the withered roots of the *Pipal* tree, under which the *Sadhu* and his devotees sat.

The old man looked up and continued: "Since *Mitra Singh*, centuries ago, planted these trees, and

Mastan Singh dug this tank, and built this house, it has been the tradition of the spot that it should be far from the inroads of secular life. Even when Ranjit Singh, the great Maharaja, settled lands on this shrine, we accepted them with great reluctance, making it clear that this place should not be turned into a rest house, and he gave us his promise. Why not then leave us in peace ?”

Daulat Ram, deeply moved by what he had heard, caught hold of the *Sadhu's* feet and said “Master of Masters ! I do not want to live here just because I want to have a roof over my head, but because I want to serve you. My story is the story of a man who has waded through the river of life, to reach its fountain-head of inner peace and harmony, and I feel I can move towards the source at your feet. Give me a chance and you will find me worthy of it.”

Baba Bishan Singh looked meditatively into space, for what seemed to be an interminable time. Then, as though acting in a mood of inspiration, he nodded assent.

Daulat Ram had won the second battle of his life, and the very next day he moved with his wife into a corner room in the courtyard. The liking of the *Sadhu* for his new friends grew into a deep spiritual communion—that quiet unspoken understanding, where silence conveys more than words.

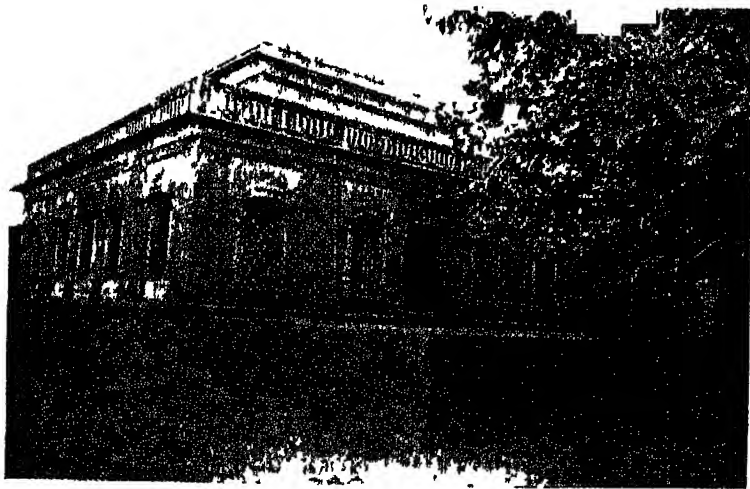
Months prolonged themselves into years, and Daulat Ram lived in mental harmony and profound

spiritual contentment. His devoted wife looked to the matters of the household, and gave him complete relief from the worries and cares of a householder's life.

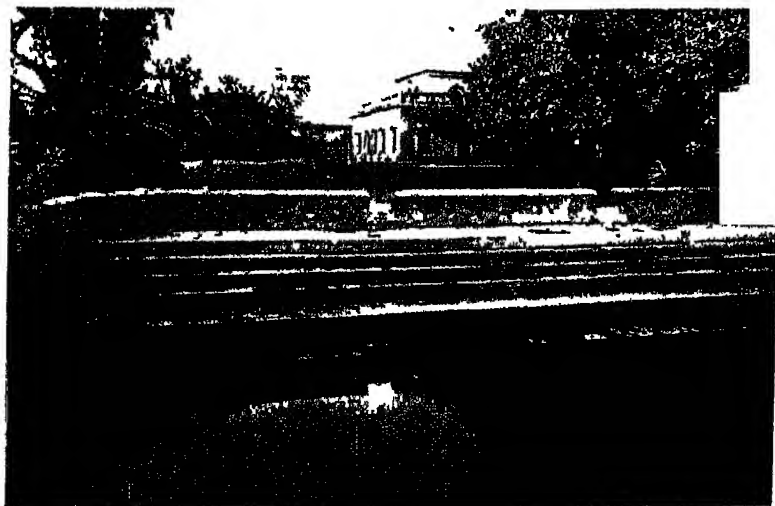
To her great joy, one day she discovered she was going to have a baby. The news thrilled the hearts of the young couple, and they looked forward to the day when their little home, under the patriarchal care of the old *Sadhu*, would echo with new life.

When the time came, Daulat Ram's wife, with her usual prudence, had taken good care to keep a store of eatables in the house, and all the other accessories needed for the confinement. The women of the village, who, every now and then, used to visit the family, were all interested in the coming event, and it became the topic of the day. Even ordinarily, the birth of a new child is not a minor event in the narrow, circumscribed life of a village, but this time it was the Police official's wife who was going to have a baby. The old women sat and talked of the good fortune of a child who was destined to be born in that house of authority and power.

In the early hours of the morning, when the pale light of the stars was mingling with the rays of the rising sun, a boy was born on the Baisakhi day. Congratulations were on every lip, sweets were distributed in time honoured fashion, and the old village midwife, who for half a century had worn



MANGATANWALA GURDWARA
 where Sir Ganga Ram was born



ANOTHER VIEW OF MANGATANWALA GURDWARA

out her tongue in repeating blessings for every child she had brought into the world, welcomed the child with the pious wish that his future station in life would be more exalted than that of his father.

Baba Bishan Singh heard the news with gesture peculiar to himself. Without changing the usual expression on his face, he said, in the monotonous voice characteristic of him : "Take good care of him. By the grace of Wah Guru, the child will be to his age what Vikramaditya was to his own times."

The words were far too flattering for a junior Police official to believe, but he took them as an expression of the solicitude and goodwill the old sage had always shown towards him.

†

The year was 1851. The baby's parents had given him a good start in life, both being naturally healthy and well-built, so he was chubby, and round faced, and full of the joy of living.

One thing was, from the very beginning, specially noticeable in the little son : his radiant and peaceful disposition. He cried seldom, and all day long smiled and kicked in great contentment. His parents both agreed to call him "Ganga Ram."

True to the saying that "there is only one best baby in the world, and every mother has got it," Ganga Ram was almost worshipped by his mother. The placid baby brought new life into the house, and enlivened the surroundings with his presence. Even the old *Sadhu* seemed to be more interested in

the world around him.

In Ganga Ram he saw his spiritual grandchild. Now that he had an object before him in the person of the baby, he had the satisfaction of showering upon him the affection pent up in the heart of every man, the expression of which he had formerly denied himself, by taking up the life of a recluse.

Often the *Sadhu* played with the baby, and, symbolising in his little life the creative powers of the Universe, would find himself lost in meditation.

All these influences were gradually imprinting themselves on the mind of the child. He absorbed unconsciously what he could not consciously express. The life of the family ran on as smoothly as the waters by which they lived.

Daulat Ram went on well at his work, being scrupulously honest, and fearless in carrying out orders from his superiors. One day it so happened that the Senior Officer was away on duty, and news reached the Police Station that a gang of dacoits, who had recently been responsible for some very gruesome murders, was camping in the neighbourhood. If adequate and timely measures were taken, there was a likelihood that they could be arrested. The task was full of danger, but the call of duty was urgent. Daulat Ram, on his own initiative, ordered the chase, and, luck being with him, he succeeded in capturing them after an arduous pursuit.

At this point, temptations of huge bribes and other considerations were thrown in his way, to make-

him release at least some of the offenders, if not all.

But Daulat Ram had been brought up in a different school. He was unyielding, and refused to be indulgent with the murderers who had been responsible for the ruin of many happy homes, making so many children orphans, and leaving so many wives widowed. He could not condone the crime of setting so many persons free, simply for his own personal gain.

His firm refusal enraged the companions of the accused, and they went away in a wild temper.

In the early hours of the afternoon, Daulat Ram received a warning from the friends of the dacoits, threatening that if the prisoners were not forthwith released, they would murder Daulat Ram, along with his wife and child and make good their escape.

This message dug up old memories. The officer in uniform sat thinking, not about the release of the prisoners, but about days gone by. In the twinkling of an eye, he was living again in the dreaded past. The trampling of hoofs echoed in his ear from the distant plains of Muzaffarnagar.

Daulat Ram stood at the cross-roads. He had very little time in which to take a vital and immediate decision.

The past surged into the little room. Before him flowed the stream, seemingly as peaceful as before. Outside he could hear his wife singing at her evening tasks, bathing for the evening *puja*. The child was gurgling with laughter at some new discovery. But

before his eyes was the sword again and the hateful torment of man by man, and the sunlight in the small window, obscured for a moment by the cloud shadows, became a symbol for him of the light of his little home that chance had again extinguished.

In Daulat Ram's mind, the vision of Mangatanwala crumbled to pieces. As a haven of security and contentment it lost all meaning.

And, in a flash, he hated Mangatanwala as much as he had hated Muzaffarnagar. In fact, he hated it more, because to lose Mangatanwala was a harder and rougher jolt, dislocating life with the suddenness of lightning.

He made his decision quickly, and, before the sunset the family had taken leave of their *Guru* and were well started on their journey. They must get as far away as possible, before the news of their sudden departure spread.

"Being born among the working people
I know that poverty is a hard old hag,
And a monster when you're pinched for actual
necessities,...
And whoever says she isn't, is a liar."
—D.H. Lawrence.

CHAPTER II

IN THE SHADOW OF THE GOLDEN TEMPLE

THE compass of devotion directed the feet of the homeless pair to the city of the Golden Temple. Daulat Ram, with his lifelong love of the Sikh *gurus*, decided to settle in Amritsar, and, in a series of weary and footsore stages, the fugitives trekked down to that haven of refuge.

In the depths of the yawning city, sprawling like an octopus in devious alley ways, a new life awaited the couple. Where before had been the placid river, the sound of prayers, the vista of crops and plenty, was a dirty network of streets and a vast number of ill-clad people. Where before had been authority and power was misery and a sea of unknown faces.

They missed the old *sadhu*, who had been their rock and comfort, and some longing for a holy shade in which to rest their tired limbs brought them to the vicinity of the Darbar Sahib. There, at least, they felt spiritually at home, and could forget the depressing surroundings. The keeping of a cow added to their material comfort, and the

fresh milk and curds created an illusion of country plenty in a strange new place where the world thought only of coins.

When Daulat Ram was a Police officer, scrupulous conduct and economic living had not only helped him to remain honest, and proof against the temptation of bribes, but had also helped him to save. The meagre store of gold, however, soon began to wear thin in the city streets, and soon the search for a livelihood became the problem of problems.

His good knowledge of Persian and his skill as a calligraphist stood him in good stead when it came to taking up a new profession. One day, when he was walking round the District Courts, he heard of some new work. The Courts wanted a copyist, and Daulat Ram easily excelled his fellow-aspirants in the art of writing. The job was in his hands.

Daulat Ram, however, had divided loyalties, and though his hands worked diligently in the dusty courts, his heart was with God. Every morning he would walk the marble pavement, by the still tank, to hear the morning music of the Golden Temple, and whenever he could, the evening hours also saw him again on the cool pavements on his way to prayers. Sometimes, perhaps, there flashed across his brain that saying "the Church covers its domes with gold and leaves its sons to starve," but devotion brought its own reward, and the supreme joy he felt in the Darbar Sahib made

him forget his daily cares.

The family had hard work, but hope was still bright in their hearts, and Ganga Ram grew up in this mixed atmosphere of great spiritual contentment and continual harassment from homely worries. Birthday followed birthday, and at the age of four, the little boy was deemed old enough to go to a private school near Darbar Sahib where Persian, Arithmetic, and Calligraphy were taught.

Before long the new pupil revealed himself to be a precocious child, and his teachers were amazed at his quickness with figures. His father too took a personal interest in his calligraphy, and tutored him, with great care and affection, in the art which gave him his living.

Ganga Ram showed great interest in his studies, and worked far more intensely than a normal child of his years. In his attitude towards his work, he showed unmistakably that the care-worn atmosphere of the home and the shifting fortunes of his parents had left a deep imprint on his young mind. With his mother's milk, he had drunk in anxiety in full measure, and this was now acting as a powerful factor in shaping his character as a growing child.

"I used to neglect my studies, but my friend picked up Persian calligraphy in no time" writes one who was at school with him at the age of four.

Soon afterwards, the young scholar was sent to another school at Katra Ahluwalian, where he pro-

gressed so well that he covered two classes in one year. A year later he repeated the same trick, and hurdled over two classes. This gave him a start of two years over those who had begun their studies with him as class-mates.

It was a significant pointer for the future in a child who, in the maturity of his age and career, was to maintain his lead in the race of life.

The brilliance of the child, though it held the promise of an easy old age for his parents, seemed in no way to mitigate the day-to-day hardships of family life.

As though their hardship was not enough, the authorities decided to change the location of the school from the neighbourhood of the temple to the precincts of Ram Bagh, about one mile away. The morning walk to school was quite pleasant, but walking back at the height of noon on a summer day was an almost unbearable torture. Yet, with scores and scores of children who belonged to his own class of the unprivileged many Ganga Ram trod the same sun-scorched road day after day.

And yet another trial was added to his school days. At an age when children of his own age would go back from school and in the deserted stillness of a summer afternoon, stay indoors and sleep, little Ganga Ram would hurry through his simple meal, and walk back once again to Ram Bagh, to join his father at his office work during

the hot afternoon.

It was not that his father forced him to work, but on his young shoulders was a head already heavy with responsibility, and there was an irresistible urge in him to work side by side with his father and increase the family income.

The testimony of his long hours of work comes from a school friend who wrote: "In the afternoon, I with other boys from the school, used to play in the parade ground outside Ram Bagh, and, when returning, I used to wait for my friend, and we walked home together."

While his friends had been resting and playing the afternoon away, Ganga Ram had added to the resources of the family.

For years this work went on, summer and winter, and the only relief from its monotony came in the winter months when his father used to carry the papers home and father and son would sit together to finish them, sometimes reserving some specially difficult piece to the early morning hours.

Such was the training which the hard school of life was busy imparting to the young boy, whose persistent industry in later years was to dazzle the eyes of his countrymen.

His work as a dutiful son did not interfere in any way with his progress at school. His teacher looked upon him as cleverness personified, and nicknamed him "my *chalaki*." His easy brilliance marked him out as first boy in the school. But

sometimes there are happenings in the lives of men which defy human calculation, and such an event was the failure of Ganga Ram to pass the Matriculation of the Calcutta University. A fellow candidate at the same examination, who was also "plucked," relates the story.

His second attempt, through the Government High School in Amritsar, was successful, and he joined the Government College, Lahore in 1869.

Founded in 1865, the Government College was only four years old and was still romantically housed inside the city walls in the Haveli of Raja Dhyan Singh, the Dogra Prime Minister of the vanished Sikh kingdom. The massive building, with its carved doors and historic associations, was princely in the eyes of the young student fresh from the narrow lanes of Amritsar. Even the narrow streets of the then old city of Lahore were invested with an exciting personality.....they meant a new and wider life, separate living for the first time, contact with greater personalities and greater intellects than had guided his early steps.

The Punjab of Ganga Ram's College days was full of interest. Names now woven into the warp and woof of the academic history of the Punjab were numbered in its staff. Colonel Holroyd and Dr. Leitner, whose reputations have reached legendary proportions because of their early work in moulding the educational frame-work of the Province, were at that time actually in service. Colonel Holroyd

was the Director of Public Instruction and was busy directing the Oriental College, and leaving his scholarly imprint on the Oriental Faculty. Dr. Leitner, who founded the Punjab University, and steered its boat as its first Registrar, was then Principal of the Government College.

Soon after Ganga Ram joined the College, the distinguished mathematician, Professor Lindsey, took charge of this subject. The love of mathematics that was already in the young boy was observed by this Professor and he took special care to nurture and develop it on the right lines. So Ganga Ram, reciprocating the interest of his teacher, and not a little flattered by it, studied mathematics, not only as a subject for examinations, but as the highest expression of the human intellect, and by it his sensitive and disciplined mind was trained to new clarity and brilliance. Even at that time, his exceptional application to study had not flagged, and he had no difficulty in maintaining himself as his professor's first student, topping the list of examinees regularly, even in the customary monthly tests.

Through the eyes of one of his classmates, who later became Prime Minister of Faridkot State, we have the following picture of the developing youth: "He was a fair-coloured thin boy of slender appearance, and looked very handsome in tight Punjabi pyjamas of Khaddar, and the long Khaddar Kurta in the fashion of the day. He always liked to

wear a white turban. There was a remarkable brilliancy on his face : intelligence beamed through his eyes ; and he had a peculiar sign on his broad forehead, considered very remarkable for his future career, and that was a perpendicular nerve just in the middle of his forehead, rising from the juncture of his eyebrows and going right up to the head. People called it the 'Raj Dand' i.e., the sign of a Raja. He was a very cool-tempered, peace-loving youth, of modest disposition, and always cheerful. I never saw or heard him quarrelling with anybody, or teasing or molesting any of his class friends : on the contrary he was often teased by careless boys in the class."

By temperament, the new student was found to be reserved, and he would open his heart only to a few of the best boys in the class who matched him in intelligence.

Frugality of habits enabled him to be educated side by side with boys from some of the richest and oldest families in the Province. The Government College has always enjoyed the reputation of being comparable to none in the cost which it entails. Boys of rich families, since its inception, have flaunted their wealth there, have brought servants, eaten and dressed expensively. Ganga Ram had reached the College by means of a scholarship, and only extreme economy allowed him to stay there.

In a corner of the old city known as Sutar Mandi he had rented a small room, big enough only to hold

a bed and a table for his books. The landlord was concerned solely with getting his rent regularly, and was not interested in providing healthy living conditions for his young tenant who hardly spoke, and who seemed to love books more than neighbours.

In the floor of Ganga Ram's simple room, there was an opening to draw water from the well below. It had no protective railing round it, and one day, as the youth was pacing the room, deep in some mathematical problem, his foot slipped over the edge and he fell straight into the well below.

Kalu, an old servant of the family of his landlord who happened to be on the spot heard the splash and hastened to rescue him. This incident to Ganga Ram ever afterwards was a source of inspiration, because in those dreadful few minutes before he was dragged out, the idea came into his mind that he was being saved for some special work that he alone had to do in the world, and that he was marked out by God as his instrument in the sphere of life to which his studies were taking him.

The more Ganga Ram thought about this incident, the more the idea of a special destiny imprinted itself on his mind. It gave him a kind of calm confidence, and proved a powerful incentive to him in his work.

Not long after this he visited his family priest, who was employed in the office of the Executive Engineer in Lahore. He had to wait for some time before he could see him, and, finding the floor hard,

he took his seat in the Executive Engineer's chair. To the office employees this was a mighty seat of power, and the priest on his arrival was horrified at his impertinence. He roughly ordered the boy to vacate the chair, trembling in spite of himself at his protégé's indiscretion.

But Ganga Ram was unperturbed, and rather amazed at the scene he had caused. "Why are you worrying about this chair? I shall occupy it one day in my own right." He seemed to be speaking in a dream, quite quietly and without resentment. His words were prophetic, although they were greeted with derisive laughter..... for twelve long years, subsequently, he sat on that very chair.

From that day onwards, Ganga Ram acted as though he had found the star to which his waggon could be hitched. Almost subconsciously, he turned his mind towards the developing possibilities of engineering.

The first step in his new career was made, when, after two years' mathematical training at the Government College, he qualified for admission in 1871 to the Thomason Engineering College, Roorkee, with a scholarship of Rs. 50 per month.

At Roorkee, he was marked out as an exceptionally bright student by the Principal, Colonel MacLagan, who always did his best to help him and encourage his undoubted engineering talent. The relationship between the two was to be a very fruitful one and it was handed down from father



AS A STUDENT

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to son. It was Colonel Maclagan's son, Sir Edward Maclagan, Governor of the Punjab, who was instrumental in recommending his father's pupil (who had by then become an illustrious son of his profession and the Province) for the conferring of a knighthood in recognition of his meritorious services. That was fifty years later.

Academic progress, instead of separating Ganga Ram from his parents had only served to strengthen the bond between them. Rs. 50 a month during his stay at Roorkee was unexpected riches, and he felt he did not need such a princely sum for his maintenance. So, keeping to the frugality of his Lahore living, he saved half the amount of the scholarship, and sent Rs. 25 home to his father every month. The old man now spent more of his time in prayer, as he had always longed to do.

It was in 1873 that Ganga Ram appeared in his final examination, which he passed, standing third in order of merit, and topping the list in the Project Paper. This success won for him a Gold Medal, a much-prized distinction, and it was instrumental in securing for him almost immediate recognition. He was appointed Assistant Engineer, and posted to Lahore, to serve his apprenticeship under the late R. B. Kanhaya Lal, then Executive Engineer of Lahore.

Ganga Ram had covered a span of twenty-two years, and before him lay the unopened book of his career.

" Per ardua ad astra "

Through hard work to the stars

CHAPTER III

MORNING GLORY

“ONE afternoon in 1873, I went with my father to the old city, where, near the Dabbi Bazar, we met two well-dressed young gentlemen about twenty-two years of age ” writes a veteran Punjab educationist, looking back over a period of nearly half a century. “ My father talked to them intimately, and, when they had gone away, I asked him ‘Lalaji, who are those two young men and what are they ?’ ‘Don’t you know them?’ replied my father in surprise, ‘one of them is Lala Balmukand Peshawria and the other is Lala Ganga Ram from Amritsar. They have passed from the Roorkee College this year and are attached to the Gurdaspur Division as Assistant Engineers. They are getting Rs. 150 a month at present,’ he added with respect, ‘and after a year they will get Rs. 250, after one year more being promoted to the Rs. 350 grade, gradually rising to the position now held by Rai Bahadur Kanhaya Lal.’ Rai Bahadur Kanhaya Lal the Executive Engineer in Lahore, being one of the very few Indian officials drawing Rs. 1,000 a month was considered in those days to be a very great man.

"Lala Ganga Ram," he adds, "made a vivid impression on my mind. I still remember his white turban and *kullah*, his well-chosen dress, the thin gold-knobbed cane which he playfully waved, his cross-legged posture, his laughing face, and above all the slanting scar on his right eyebrow, which shone like a star and added to his appearance. And he was wearing boots, which were, then, rarely worn by Indians."

Here we see for the first time the Ganga Ram who was to make his name as a social reformer and iconoclast. To wear English boots was quite an unusual thing to do in those days of orthodoxy, and obviously he was at heart a rebel against irrational inhibitions. This rebellion was to be expressed later on a higher plane when he came out against the code of tyranny which yearly martyred thousands of widows.

Many of Ganga Ram's contemporaries must have envied his good fortune, and, although Rs. 150 appears meagre enough to modern eyes, in actual standard of living it meant a great deal at the time. The prospects of future promotion were dazzling, and, if we remember that the daily wages of a coolie were then two and a half annas, and that a mason or a carpenter only got six annas a day, the young engineer's good fortune assumes considerable proportions.

While he was in Amritsar, the family continued to live in the same house in Katra Ahlu-

walian, and Lala Daulat Ram saw all his fondest prayers answered as his son's growing prosperity freed him from worldly cares, and gave him time for his devotions. The simple household, that had before seen hard days, blossomed into new life, and the honour and respect which came to their son seemed to the old couple a fit culmination of those days of doubt and despair. Gone were the days of hard and unproductive labour in the heat of the noonday sun; the evenings now saw an ageing but happy father walking down the holy marble paving stones to the Darbar Sahib to listen to the wisdom of the Granth.

Two years later Ganga Ram was transferred to Dera Ghazi Khan. His family and friends were all depressed that he was transferred to such an outlandish station, but Nature had its own plans, and it ultimately turned out to the young engineer's good fortune. It was while he was posted in this desert-like place that he came into close contact with Sir Robert Sandeman who, as the Deputy Commissioner of the District, was at that time busy executing the plans of the Government of India in carrying on a forward policy among the tribes that skirted the Frontier.

Lala Ganga Ram proved to be just the man Sir Robert was looking for and his engineering work in difficult areas was of great value to him.

This contact proved to be of the greatest utility to Ganga Ram, because that same year, with Sir

Robert's recommendation behind him, he was chosen, although a very junior engineer, to work in Lahore in connection with the visit of H. R. H. the Prince of Wales.

This was a rare opportunity to prove his capabilities, and Ganga Ram's natural gifts and knowledge of details served him so well in the discharge of his duties that within two years he was again singled out and his services were requisitioned on special duty for the Imperial Assemblage at Delhi. He distinguished himself in constructing the Grand Amphitheatre which won the admiration of his colleagues and the thanks of the Government.

At this period, the young engineer, upon whom the encouraging and smiling face of fortune was turning, went from one specialised job to another. Those who wind up to the healthy heights of Dalhousie, or speed through the welcoming spaciousness of the Kangra Valley little realise that they owe the luxury of travelling over the Amritsar-Pathankot section of the North-Western Railway to the labour of Ganga Ram's brain. It was to this job that he was deputed on his return from Delhi, and it was he who was responsible for preparing the projects and estimates of the scheme, and finally seeing it completed.

During this work he stayed with his family in Amritsar, and had the satisfaction of building a new house in the Hall Bazar for them. It was here that R. B. Sewak Ram, his eldest son, was born, later

destined to help his father in many of his great enterprises.

His work at Delhi had greatly impressed Lord Ripon, and, when the time came for nominating candidates for further training in England, Ganga Ram was selected to be sent to Bradford by the Government of India. There for two years he was to get special training in waterworks and drainage.

There is great paucity of material on this particular period of his career. No diaries, reports, letters, or other documentary evidence is to be found, and those first interesting impressions of a foreign country are not available for the biographer. But this much we know, that he was profoundly moved by the high standard of living of the working classes of England, compared with their less fortunate brothers in India, and his distinctly modernistic attitude to poverty, and the solution of economic problems, which later brought him into disagreement with the handicraft schemes of Mr. Gandhi, date mainly from this time.

Of this, however, we have definite evidence that staying in a foreign country and admiration of foreign talent served but to enhance his great pride in India and things Indian. The chance reference of a contemporary tells us that he had great national self-respect, and was most friendly with the other Indians with whom he came into contact in England. Life in a strange country, which is always the test par excellence of human character and adaptability,

showed that his attitude to life was essentially healthy, and that the keynote of his dealings with men was straightforwardness and reliability.

It goes without saying that he maintained in England the very high standard which he had always set himself in his engineering work, and qualified with distinction. The brilliance and efficiency of his work in India, which had made him a starred member of the Engineering Service, were if anything enhanced as his knowledge increased. Among so many young students of the theory of engineering, the presence of a man whose practical experience extended to Imperial Delhi was bound to be felt and recognised, and he commanded the respect of his professors as well as his fellow-students.

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On his return to India, Lala Ganga Ram with his enhanced reputation was in great demand, and the Government decided to depute him to prepare his water supply and drainage scheme for Peshawar. Thus the water supply problems of India became his special study and care, and he was later to be instrumental in introducing similar schemes in Ambala, Karnal, and Gujranwala.

His period of service had now lengthened to twelve years, and in 1885 he was posted to Lahore as Assistant Engineer, this being the first time that his early dream showed signs of fulfilling itself.

In point of time, his transfer to the capital of the Province coincided with the construction of the

new High Court Buildings, and the Cathedral, and it fell to his lot to supervise the building of these two monumental pieces of Lahore architecture.

During the next two years, he now and then officiated as Executive Engineer of Lahore, thus coming appreciably nearer his objective. Two years after that, he was selected by the Chief Engineer, Sir Aeneas Perkins as Special Engineer for the designing and construction of the Aitchison Chiefs' College at Lahore.

It was while constructing this College that he became known to many young boys who were to play important rôles in the civic life of the Punjab. Nawab Sir Zulfiqar Ali Khan remembered with fondness the engineer whose genial temper and friendly manners attracted many youngsters, and made them seek his friendship. Sir Sunder Singh Majithia counts Lala Ganga Ram among the most outstanding and memorable of the personalities with whom he came into contact while a student at the College.

After he had finished his studies at the Chiefs College and the fine red brick building stood complete and surrounded by its magnificent shady finished garden, Ganga Ram was promoted to be Executive Engineer of the Lahore Division. At last he was sitting in the chair he had coveted "in his own right."

We have no record of the dramatic moment when he sat in that chair for the first time, but we

may be sure, that, behind the smiling face that he usually showed to the world, was far greater emotion than usually accompanies such a routine procedure. The employees in the office, deferentially shaking hands and saluting him, could not know what a culmination of the hopes and work and dreams of many years it was, and how the spotless clothes of the new Executive Engineer could hardly contain beating of his excited heart.

The twelve years during which he held this office were years of responsibility and the worry attendant upon it, but Ganga Ram's energy and grasp of his work never flagged, and these years created in Lahore almost a legendary name for the Executive Engineer in the world of architecture. To him goes the credit of designing and constructing the magnificent buildings of the Lahore Museum, the Mayo School of Arts, the General Post Office, the Albert Victor Wing of the Lahore Mayo Hospital, and the Government College Chemical Laboratory. This we have on the authority of *The Journal of Indian Engineering*.

From the leafy end of the Mall that begins with the Aitchison College, to the University and down by the Museum it is the spirit and creative vision of Ganga Ram which pervades the air. The Indian arches, the love of Indian tradition mirror themselves in his buildings, and they look at home on Indian soil. But, in their construction, all the tricks and devices of the scientific West have been



AS RAI BAHADUR

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employed to improve them, to protect them from the heat and cold of the Punjab climate, to ensure that sanitation was efficient and unobtrusive. More modern styles have since invaded the Mall, and the future will show many others with more modern construction and technique, but the simple dignity of Ganga Ram's buildings will bear comparison with the best that the future has to offer.

Lahore was not the only sphere of his activity, and in many other growing towns of the province, his hand and ideas are visible notably in the Courts and Offices in Lyallpur, Sargodha and Sheikhpura.

In recognition of his splendid work he received the title of Rai Bahadur. "His regime as an Executive Engineer was marked," writes Principal A. S. Hemmy of the Government College, Lahore, a versatile critic of Art and Architecture, "by the endeavour to ensure the maximum of result with the minimum of expenditure consistent with efficiency, which has led to a style of building, both public and private in Lahore which continued for many years, after he had left for other spheres of work. Indeed, one might almost speak of a Ganga Ram period of architecture of which the Government College Chemical Laboratory is an example....."

The work was heavy and exacting, and Ganga Ram was always on the alert to save energy by new methods and devices. The old method of calculation was long-winded and tiring, and Ganga Ram's efficient and inventive brain spurred him on to

invent and patent his slide rule for calculating the dimension of beams and trusses, of retaining walls, and of girders of all shapes and sizes. He also patented his designs for an antithermal flat roof for buildings, and for interlocking bricks for wells. These inventions have been acclaimed as of far-reaching importance in the engineering world, and have been widely used.



No account of his work in Lahore can be complete without mentioning the part he played in the remaking of the old town as an *ex-officio* Municipal Commissioner. "The present generation of Lahore," we are told by an old citizen, "have no idea of the brick-laid streets, the narrow drains with dead ends, and the horrible stench which they emitted resulting in disease, cholera, and malaria which played havoc all the year round....."

"The present narrow streets were narrower in those days, and through many of them a cart could not pass easily. The Bazaz Hatta was no better. In the present triangular space there was perched a three-sided bazar, one side of which was occupied by the *Patolis*, who carried on a flourishing trade in making *nalas*, *parandas*, *doris*, and other silken articles which are almost given up."

The Water Works schemes in the city was started as late as 1875, and at that time they were still incomplete and there was no efficient drainage system. For that, the City of Lahore is indebted to

Ganga Ram. It is to him that they owe metalled streets, paved lanes, and properly laid drains, which lessened the rigours of malaria and thus materially helped in raising the standard of health of the citizens.

Thus Ganga Ram's influence went much deeper than the spectacular outside buildings which everyone can see, and affected a much larger number of people than a cursory glance might estimate. If we add to these reforms of Lahore the tremendous and mainly unacknowledged influence that Ganga Ram and his ideas had on domestic architecture, the sum-total is tremendous. His new ideas on construction were admired and copied by a good many of the private contractors in Lahore, and the stamp of his particular mind on the general appearance of the residential quarters of Lahore is obvious to anyone who goes about with his eyes open.

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During the years when Ganga Ram was fulfilling his official duties in Lahore, he lived in Anarkali, which was then the centre of fashion and wealth. It was here that he celebrated the wedding of his eldest daughter, who later presented him a grandson in the person of Mr. Aftab Rai, who is to-day the Honorary Secretary of the great Trust which stands in his name.

"I still remember" writes a friend reminiscently, "how we stood up in parallel rows to welcome the bridegroom, under the leadership of L. Daulat Ram."

Who can tell of the feelings of the old father on that auspicious occasion, in the late evening of his life, when he saw the prosperity and flowering of his family at the marriage celebrations? Who knows, at that time when the music and lights of the marriage procession were bringing new life into the bright street below, if his mind was not going back to the old *Sadhu*, he had so devotedly served, and to his predictions of the future of the baby son? Perhaps in his simple devout soul he saw in all this pomp and glory but a result of his years of patient care and devotion, some reward for his unremitting service of the *Gurus* in the quiet temple at Amritsar.



LALA DAULAT RAM

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“ Everything is possible. Faith is the substance of things hoped for, the evidence of things not seen.”

—*Henry Ford.*

CHAPTER IV

DRAMA AT THE DARBAR

WITH twenty-seven years of service to his credit, Ganga Ram had reached the high water mark of his service prosperity. The year 1900 showed that there were even higher slopes to climb, when he was selected by Lord Curzon to act as Superintendent of Works at the Imperial Darbar to be held in connection with the accession of King Edward VII. With Lord Curzon's reputation of being an exacting and hard taskmaster, Ganga Ram looked forward to his work at the Darbar as potentially the severest trial of his engineering life.

In spite of the difficulties, foreseen and unforeseen, that crowded round him, Ganga Ram, true to his character, was undaunted, and full of courage for the future.

His new appointment was not a simple affair. It had created jealousy in Service circles, not only in his own Province, but all over India, where European engineers deeply resented the appointment of an Indian engineer, and looked upon it as a slight on European engineers by Lord Curzon. The Viceroy was not the man to bow to criticism or the rumblings

of discontent: he had chosen his man with care, and he was going to keep him. In Darbar experience and reputation there was no one to touch him, and Lord Curzon worshipped efficiency.

Ganga Ram's task thus became doubly difficult. He not only had his own reputation to justify, he had to make it clear beyond doubt that the Viceroy's choice of an Indian engineer was wise. He had India's honour to defend, and he knew there were a number of sharks to devour the body if he failed.

The plans for the Darbar were stupendous in their conception. Curzon loved grandeur, and he fancied himself as the inheritor of an Imperial heritage. He was to be the central figure in a colourful drama, enacted in the city of the Great Moghul. It was an unrivalled opportunity to display the wealth and might of the Empire.

Curzon not only wanted to provide a setting of kingly splendour, he wanted to create a new legend. British rule in India, with its mercantile associations, had been at a disadvantage: "Ferangi Raj" had always been identified with "Company Angrez Bahadur". It was not synonymous with "Badshah", the prestige which had always hallowed the memory of the Imperial Moghuls.

Lord Curzon's plans were dominated by the desire to dazzle, and a habit of changing them as new ideas presented themselves to him.....often with a lightning suddenness that would have daunted the resourcefulness of most executives. But the Indian

engineer always impressed the Viceroy so much with his capabilities of rising to the occasion, that, when his varying moods and fancies dictated last minute alterations, he always had the confidence that Ganga Ram was behind him, and as dependable as a rock. His skill could carry out anything and everything.

Many are the tales told of the Imperial Darbar, and the excitement that went on behind the scenes. On the very eve of the Darbar, Curzon's whim demanded that the road leading to the Amphitheatre should be changed. But a serious obstacle presented itself in the shape of a *Nallah*, over which the new road had to be carried. After discussing the scheme threadbare with his advisors, who were very much against it, the Viceroy cut the argument short by saying "Oh, send for Ganga Ram and leave it all to him. He will manage it somehow." Ganga Ram was accordingly informed. He accepted it calmly. "I will do my best to carry it out" was all he said.

All night long cries of "*Bol Jawan, Hi, Ha*" kept the camp awake. Gangs of workmen were busy building the bridge under the personal supervision of the Indian engineer. As if he had Alladin's lamp in his hand, by morning he was able to throw a finely constructed bridge open to the traffic. The explanation of this engineering miracle is interesting. It had so happened that some months before Ganga Ram had chanced to go to a timber store in search of some material. There he saw about two hundred particularly long tree trunks lying on one side.

Always ready to take an opportunity and anticipate difficulties, he purchased the trunks and had them removed to his own store, thinking perhaps, that they might come in use some time or the other for throwing a temporary bridge over a canal, or erecting a high scaffolding. It was these trunks which enabled him to build the bridge overnight to the delight and astonishment of Lord Curzon.

Not once, but many times, his adaptability and ingeniousness were put to test. Towards the close of the Darbar preparations, it was unexpectedly found that the water supply was defective, the available water on examination being deemed unsatisfactory. This was a most serious situation, and it was obvious that, a new water supply having been found, all the trouble of laying new pipes in the Darbar grounds would have to be undertaken. The problem was to find suitable pipes at short notice. All enquiries from firms within easy reach drew blanks. Post-haste enquiries were made of municipalities, in the neighbourhood, and, ultimately, in the course of this comb-out, Ganga Ram discovered that a neighbouring Rajputana State, not far from Delhi, was on the point of installing a complete water-supply system in the capital town. He rushed to the Foreign Secretary and requested him to give him the whole of the material. The Foreign Secretary had his eye on diplomatic complications, moreover, the gathering together of so much material had not been easy. He hesitated. Ganga Ram, with

the audacity which characterised him, took it upon himself to get a telegram sent to the Chief Engineer of the State on behalf of the Viceroy, ordering him to report himself in Delhi immediately, with all his stores.

It is also typical of his forethought that he made arrangements for a special train to be placed at the disposal of the Engineer, so that he could transport his materials to Delhi with the least possible delay.

Ganga Ram, with so many difficulties, and problems that would have baffled many an engineer's brain, had luckily found an assistant of sterling value. Finding the work in Delhi more than he expected, he requested the authorities to place at his disposal the services of a Senior Engineer from the irrigation Branch in the United Provinces. He had his eye on a man whose work he knew and liked. The Government agreed to his request for an Assistant, but, instead of the Senior Man whom he wanted, it was a very young and boyish-looking engineer who, on the second of November 1902, reported himself to his Chief.

Ganga Ram lost his temper. "Am I running a school here that they have sent this lad to me?" was his infuriated remark. Ultimately, it was this boy who was to prove his right-hand man, not only in the organisation of this Darbar, but for the rest of his life. The young man whose very appearance had sent the elderly engineer into a fierce temper became his closest friend and dearest counsellor in

later days. He subsequently retired as Chief Engineer of the U. P. Government, and to-day holds the high office of Pro-Vice-Chancellor of the Benares Hindu University as Raja Jawala Parshad. It is to his accurate and vivid memory that we are mainly indebted for the anecdotes relating to work at the Darbar.

"A most piquant situation arose" he tells us, "when at the very last minute it was discovered that a very reputable firm who had undertaken to supply cloth to cover the passage between the Diwan-i-Khas and the Diwan-i-Am had failed to do so. This gave rise to a serious crisis, as the Dinner was going to be held in the Diwan-i-Khas, and the dance was arranged in the Diwan-i-Am. The lack of this passage in the best style would have meant the failure of arrangements in the most conspicuous and embarrassing manner. Ganga Ram's mettle was once again tested, and, as usual he faced the trial unmoved. To improvise a passage he extended the Diwan-i-Am itself by imitation pillars and an imitation roof. Those who saw the imposing grandeur of the Diwan-i-Am will realise the magnitude of the task. Boldly undertaken it was carried through successfully and added to the decorative value of the scheme."

With such gigantic preparations afoot, perplexing situations were bound to crop up round every corner. Raja Jawala Prasad relates another incident, with a twinkle in his eye. When the

stage for the Darbar was fully set, and the Princes were almost due to arrive, it was found that the ladder reaching up the dais for the Army signals which were to control the traffic was missing. Ganga Ram, instead of getting perturbed remained as calm as ever, and without blaming other people, put Jawala Prasad on the job. Rushing about like a hurricane, the young man collected the whole of the labour force, and new ladder was there before the loss had been detected. Such incidents, managed with pluck and good humour, were all in the strain of the day's work, but high-pressure efforts were in Ganga Ram's blood, and his subordinates soon entered into the spirit of the thing.

It was a ready sense of humour which kept their overtaxed nerves in order, and both the Chief Engineer and his Assistant could see the funny side of things. It was as well. On the smooth working out of the Darbar plans depended the favour of Lord Curzon in one of the most ambitious plans of his career.

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The Darbar was over, and the Indian engineer had won his spurs. But the New Year's Honours List did not include his name as the recipient of any decoration which nobody more richly deserved than he. Once again it was the Green God of Jealousy which cast its shadows in the background of Ganga Ram's brilliant achievement. Recommendations are usually sent up before September, and

the envious depended upon a last minute slip occurring in his work, and they waited until the last minute before committing themselves. At last their hands were forced, and, in the hour of his success, the shadows of scepticism drifted away, and Ganga Ram stood unassailed in the full glory of a well-completed task. Later he received a C.I.E. in recognition of his work.

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On his return to the Punjab, a new situation presented itself. His promotion to the grade of a Superintending Engineer was due, and the authorities were hesitating. "He was the best engineer the Buildings and Roads Department possessed" says *The Journal of Indian Engineering* "yet he was not thought fit for promotion to the Superintending Engineer's class. It was an extraordinary position."

Truly enough, nobody in the whole cadre of the Engineering Service was more fitted for promotion. To deny that right to an engineer who had started his career in Delhi under the Viceroy was nothing short of narrow-minded and race-conscious bureaucracy. The Engineer who had won the approbation of the highest Executive authority in the land, and who had succeeded in satisfying the fastidiousness of Lord Curzon, could by no law of justice be held back from taking his rightful promotion. To debar him from climbing into a higher rung of the service simply because he was an Indian was a situation which Ganga Ram, with his great sense of national self-respect, could never have

swallowed. As *The Journal of Indian Engineering* wrote :

"He was never a toady to the powers-that-be in his own interests; always polite and never rude, he just did his work and left it to speak for itself without claiming any credit for himself for doing it; he was transparently honest and no pusher. But he would not have been human if he had not felt that he could do better than in Government service. He retired in 1903, some years before he would have been super-annuated, and his retirement brought him what he valued more than anything else, the grant of twenty squares of land in the Chenab Colonies, presumably as reward for his past services."

" The White Rabbit put on his spectacles.

"Where shall I begin, please your Majesty ? ",

he asked.

" Begin at the beginning " the King said gravely, " and
go on till you come to the end; then stop."

—*Alice in Wonderland.*

CHAPTER V

IMPRINT ON PATIALA

GANGA RAM had passed out of Punjab Government circles but he was not yet destined to pass out of Punjab or official life. On his premature retirement, the Patiala Darbar invited him to take charge of all departments of State engineering work except irrigation, in the capacity of a Superintending Engineer. In 1903 he joined his new post, and soon the Master Mind of City Building was at its favourite game. Slowly the whole face of Patiala began to change. Construction was rapid, and the grace of his designs altered the whole atmosphere of the State capital. The magnificent Moti Bagh Palace, the Ijlas-i-Khas, the Secretariat Building, the Victoria Girls' School, the City High School, the Law Courts, the Police Station and the Dispensary all bore the stamp of his handiwork.

During his tenure of office in Patiala, extending over seven years, he was responsible for executing engineering projects costing over a crore of rupees. He re-roofed the ancient Darbar Hall with a truss roof and an ornamental ceiling of plaster-of-paris, and converted it into a single hall measuring 13 × 60

× 50 ft. To him also is due the fine drainage system of Patiala City, and the Water Works of Patiala and Chail.

The drainage of Patiala City is generally regarded as a masterpiece of engineering skill, and Ganga Ram as well as the public regarded it as his *chef d'oeuvre* there. It has materially contributed towards improving the health and cleanliness of the city, while the Hydro-Electric system has brought a cheap and plentiful supply of pure water into the homes of the capital.

"Sir Ganga Ram" wrote the Patiala Darbar in appreciation of his services, "was held in high esteem both by the Government and people of Patiala on account of his high professional ability and ever courteous behaviour in private life. His services to the Patiala Engineering Department will always be gratefully remembered."

The late Maharaja himself held him in such a high esteem that he is reported to have usually addressed him as "Uncle", and we are told by one of his own friends that "he used his influence for the good of the State".

Everywhere he went, he inspired affection, whether from the Maharaja or from his meanest subordinate. His great qualities as a man were in no wise overshadowed by his greatness as an engineer: his very humanity took away the superiority that was implicit in his position and made everybody feel at home in his company.

Writing of their first meeting in 1907, Sir Sita Ram an ex-President of the U. P. Legislative Council says: "On my young mind he instantaneously produced the impression of not only a massive but a dynamic personality. I went with a few young friends to visit Patiala where Rai Ganga Ram was then employed. We made ourselves his guests without the least formality, and he made us feel at home. His geniality, his kindness, and his absence of reserve will be ever fresh in my memory. He even told us what places to see during our day in Patiala. He appreciated a joke, and had a good sense of humour. His favourite exercise was a massage in bed, while doing strenuous brain work."

As an officer, he always displayed a spirit of ready co-operation which was the very negation of a red-tape mentality. "For three years I was employed in Patiala State as Director of Public Instruction," says Lala Shiv Dyal, a veteran Punjab educationist, "and to me he was always of great help in his official capacity. He generally supported my measures, and were it not for him it would not have been possible to do what I did. According to procedure, an oral sanction always preceded the official sanction, and in some cases school buildings were almost ready before the formal sanction was received!

"It must also be mentioned to his credit that Ganga Ram, although he had served for so many years in Governmental circle had not developed the well-known official 'crust'. His big heart was not

limited by the circumstances of his life, and under his big chest it throbbed with kindness to everyone who was in trouble. Ganga Ram did not wait to be charitable until he had made piles of wealth—all through his life he gave where he could, and without show.

"We were both Vice-Presidents of the Patiala Municipality," continues Lala Shiv Dyal. "That body gave me Rs. 500 during the malarial season every year, together with a good deal of quinine for house to house distribution among the deserving poor. Rai Ganga Ram placed 100 blankets every winter at my disposal. I thus came to know many poor families.

"A blind young man was recommended by me to the Rai Sahib for monetary help. He gave him a pension of Rs. 5 per month, which was continued to his widow after his death in 1924. This is only one of the numerous acts of silent charity which our friend gave with his right hand in such a way that his left hand did not know it. When plague broke out in Sunam, he provided the panic-stricken people with huts and medicines from his own pocket."

Ganga Ram might, in fact, be termed an adept in the art of giving. And let nobody think that it is an easy art. All through his life it had been his delight to give, and he could never harden his heart to the sufferings of the poor, particularly the middle-class poor from whose ranks he himself had sprung. As a very highly placed Government official tells us,

"As to his kind and sympathetic nature, I should like to refer to his treatment of poor starving people who, during the famine of 1899, had to go to relief works for food. He treated them just like his children, and did all that lay in his power to make them happy and comfortable. One who had served under him told me some twenty years ago that his care of the relief workers was so thorough that there was very little mortality among them."

As a friend he had that instinctive touch of gentle familiarity which won the hearts of those who came into contact with him. Little gestures go a long way in revealing the essential humanity which lies behind the cold exterior of a man whose life had been tempered in the fire of poverty and struggle.

"Once when I was in Lahore" a friend said, "I received a telegram that a dead plague rat had been found in my *kothi*. After an hour, the news of a second dead rat was flashed to me. I left by the first train. Arriving at Patiala, I thought of taking advice from Rai Ganga Ram before going home. After hearing me, in his usual manner he expressed his displeasure at my keeping him in the dark, told me to remain in his place, and cried out: "Kanhaya! take the Tum-Tum and bring my boys from his *kothi*." I gratefully remember the affectionate emphasis which he laid upon the word "*mere*" (my). Tents were pitched in the compound, and we passed nearly three months there, and always shared his

hospitality and jovial company."

A touching incident is related by another friend who went to visit him. "Seeing an old man with his back half bent, sitting on a *charpai*," he said, "I at once recognised him and asked, 'how have you come here?' With beam of delight in his eyes, the old man said, 'You see I have become too old to work and my master's circumstances are no longer what they were. I was on the point of starvation when I suddenly thought of the Rai Sahib. I wrote to him and he immediately sent for me,' and the old man's voice stumbled as though he was overcome with emotion when he added, 'and now I am being supported by the Rai Sahib, and with him I shall always remain.'" The old man was Kalu, the landlord's servant who had snatched Ganga Ram out of the well, and the jaws of death, when he was only a student in the Government College.

The knowledge of Kalu's lonely and unprotected old age was to inspire Ganga Ram to found an institution for all such helpless people, who have been left like backwash by the restless stream of life. The feeling that all helplessness aroused in him was personified in this old man, who had served and laboured while strength yet remained in him, and who in the evening of his life found himself discarded and homeless.

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Thus ended another span of seven years, another period of intense activity, which had transformed

Patiala, and brought him nearer to the end of his service life, and the age of his sixtieth year. Now he took a long leave and went to England for rest, accompanied by his eldest son Sewak Ram. It was during this visit that they both made a vast tour of agricultural centres in England about which we are to hear in detail later. Getting back from England the Rai Bahadur wanted to retire from Patiala State Service. But the Imperial Darbar was to be held in Delhi in 1911. And the Government of India required the services of a skilled engineer as advisor to the Indian States. The Maharajah of Patiala at that moment prevailed upon Ganga Ram to undertake the work of being Special Advisor to the Indian Chiefs' Camp. He accepted what he regarded as a call of duty, and found himself rubbing shoulders with fellow members of the Darbar Committee. He was very much respected by his colleagues, who bowed to his rich Darbar experience, and let him have his own way in planning.

The work was ultimately discharged so handsomely that the Government gave him another official recognition in the form of an M.V.O.

On his retirement from Patiala, Ganga Ram looked forward to many years of hard work and an interesting life developing agricultural engineering—a subject very dear to his heart.

"To be able to put oneself in the second place is
to know the secret of life."

—Ivan Tourguénèff

CHAPTER VI

CALL TO BENARES

ON his retirement, he had, for all practical purposes, withdrawn from professional work; but he was not able to escape destiny in the form of the man who has been nick-named "the most skilled beggar in the whole of India," putting even Mahatma Gandhi in the shade. Pandit Madan Mohan Malaviya, a Congress veteran, had come to demand service of him. The distinguished figure of the great lover of Hinduism, his face lit with an enthusiasm that shone beyond human brightness, would have touched the heart of a much sterner man—and Ganga Ram knew, when his work and experience was demanded, that it was not in his power to refuse.

Pandit Malaviya had spent a life in service to India, and his long life as a patriot had taught him that "men may create movements, but it is only institutions that can create a nation." He had within him the vision of an ideal University, which he gradually crystallised into the plan of the Benares Hindu University, situating it at Kashi, the ancient seat of Saraswati, and the cradle of Indian culture.

He saw as in a vision the dignified building that would mould the youth of India in true Indian ideals, near the Ganges, and steeped in ancient knowledge, in the lovely atmosphere of the town that for countless centuries has been the centre of learning and a place of pilgrimage for all who wanted to sit at the feet of great teachers. It is typical of the man that, while loving and reverencing the past, he sought to confer on the child of his heart and his soul the benefit of the highest technical skill and experience of the West, and the scientific knowledge which this century has given to the world.

Ganga Ram was, an idealist at heart, as his father had been, and the old *Sadhu* still sat immobile within his inner memory; even if his mind could not recall his face, the memory of those dim, far away days was there, the memory of countless conversations in the family circle. So his reply was as Fate had decreed it. He not only agreed to act as the Chief Engineer, in an honorary capacity, but promised a lakh of rupees for the opening of a canal to be named Ganga Canal, for practical instruction and demonstration to the students of the Engineering College.

To the University building construction, he gave of the richness of his experience, for love of his work and not for money. Some of the devices he adopted rank among the finest examples of his particular talent: an ingenious use of the best

materials in such an economical way that they ceased to be luxuries.

At the time, "rolled steel beams were unobtainable, and, turning his attention to reinforced brickwork, he constructed all the lintels, beams, girders and staircases of this material. The area of reinforced brickwork exceeding six lakhs of square feet. The biggest span covered by a simple slab, that of the chemical laboratory, 52 feet \times 73 feet, had only one beam in the centre, over which a continuous reinforced brickwork slab was placed. The Water Reservoirs of the University, with capacities of 6,000 to 7,000 gallons each, were made in reinforced brickwork, resting on bottom flanges of encased and strengthened steel joints. Thus 16,000 square feet of roofs were built at a cost of 8 annas per square foot."

"All the plans of the buildings of the Hindu University will cherish with gratitude the memory of the deep and practical interest which he took in its organisation and development." So wrote Pandit Malaviya, years afterwards, in fitting memorial of his hard and selfless work.

As an engineer, it is typical of his adaptable and vital mind, that he always went from one improvement to another and never standardised his methods.

While in Patiala, when the problems of sanitation and water supply presented themselves he invented the system of pipe-boring for wells. This

significant discovery, he did not, as do so many engineers, keep jealously to himself. Realising its importance in the creation of a cheap and effective water supply, he shared the idea with his brother-engineers, just as later he was to share his wealth with his fellow-citizens. He also wrote *The Pocket Book of Engineering* which has become a text on the subject, famous within India and outside.

His writing work was not extensive, but he was a regular contributor to *Indian Engineering*, the foremost journal of his profession. His *Glossary of Notes on Water Works* was first published in their columns, and was later produced in book form, in response to public demand.

Membership of both the Institute of Mechanical Engineers and the Institute of Civil Engineers were later offered and accepted in recognition of his reputation. We cannot do better than sum up the professional career of this great Indian engineer, than in the words of Sir Lionel Jacob, a distinguished member of the Punjab Irrigation Department: "Rai Bahadur Ganga Ram, by originality of thought and technical skill, by the natural enterprise of his mind, and natural business methods, fully deserves the reputation he enjoyed, and his brother-engineers generally, and his countrymen and Thomason College in particular, have every reason to be proud of his success."

"Investigations will show that the great fortunes which have been made in this country, and the same is probably true of other lands, have come to men who have performed great and far-reaching economic services—men who, with great faith in the future of their country, have done most for the development of its resources. The man will be most successful who confers the greatest service on the world."

—*John D. Rockefeller.*

CHAPTER VII

THE MIDDAY SUN

“THE problem of India is the problem of water ” said Ganga Ram to himself, as he thought of the position of agriculture in India’s national economy. His engineer’s hand itched to tackle this urgent task. “Engineering skill,” he would say to himself, “can move mountains, and the question of water is an ant-hill compared with what we can really do.”

Perhaps before his mind’s eye loomed the great statue of De Lesseps, pointing towards the Suez Canal, a monument to the memory of an engineer who changed the course of world history, and whose construction, the Suez Canal, long after his death, continues to play a vital rôle in the moulding of international policies.

During his service days, when the work of the day was over, and the problems of building shelved until the morning, his restless mind would come back to the land, to all the plans he was evolving. It became almost an obsession with him. The sorry statistics of waste lands in the Punjab spurred his brain to greater activity. “Taking the Punjab

alone," he found that "the culturable area in the Province (excluding the states) was 46 million acres, out of which 17 million acres, or 37 per cent was lying waste on account of deficient rainfall or artificial means of irrigation." With his usual realism, he also realized the limitations of irrigation by canal: "The Punjab may not have reached the limit of its tether in the matter of canal progress, but there are everywhere signs that the easier projects have been exhausted, and every engineering scheme points to greater engineering difficulties and sometimes to prohibitive expense. Moreover, there are places to which canal water cannot in any case be conveyed; and, in addition, there are certain irrigated tracts where the excessive use of water has so raised the spring level that the soil is water-logged and the country is liable to epidemics. This mischief must be effectively cured."

In a moment of inspiration, an idea flashed across his mind—Lift Irrigation! From that moment, the development of the idea of Lift Irrigation in the Punjab waste lands was his one interest. Many a time he took this idea with him into the valley of silence, and sat immersed in contemplation for hours perfecting details with the care of an artist. Long thought strengthened his convictions, and he began to long for the day when the burdensome harness of wage-earning would be taken from his shoulders, and he would have the freedom to put his ideas to the test of experience.

The moment, therefore, this opportunity presented itself in the form of the Government's unwillingness to grant him promotion, he resigned with something akin to satisfaction. Blessings, like calamities, have the habit of never coming singly, and his voluntary retirement brought him the grant of twenty squares of land in the Rachna Doab, a reward which was nearest to his agriculturist heart.

Thus Ganga Ram took the first step on the great career which was to mark him out as one of the great Indians of our time.

Before long opportunity again came his way. "The Lower Chenab Canal, the most successful and most profitable irrigation project in India, was irrigating the Rachna Doab by gravitation, but there were in places high-level areas which could not be so watered, and, it is believed, the Superintending Engineer, Mr.—afterwards Sir—Lionel Jacob, recommended lift installations for such lands as a Government affair. His proposals were not sanctioned, and he then pressed that Rai Bahadur Ganga Ram, in whose abilities he had confidence, should be given the land and the opportunity of bringing his theories into practice," wrote *The Indian Journal of Engineering*. "In this he was successful, and the Rai Bahadur obtained two additional grants of fifty and forty-seven squares, about 2,500 acres, for cultivation by means of lift irrigation." One of these plots, fifty acres in

extent, was made over to him on the condition that he would arrange to irrigate it by lifting water by steam power, and the second grant of forty-seven squares of high land for lift irrigation by electricity."

To obtain proprietary rights, he was expected to pay Rs. 27,000. Strangely enough, when we think of the conditions to-day, since he had led a life of scrupulous honesty in service he had not got the money to pay for the land, and finally he had to fall back on his Provident Fund to meet this liability.

In the working out of these projects, he was assisted by his eldest son Lala Sewak Ram, who gave up his career at the Bar to put his hand to his father's plough.

"The land," he tells us, "was situated from six feet to nine feet higher than the canal level at which water could be delivered by flow. The object of this grant was to conduct a very interesting experiment in irrigation by pumping, the first of its kind in Northern India." He added: "Shortly after the grant was sanctioned, machinery obtained from England was in course of construction. Pumps which had proved so successful in reclamation and drainage works in the English Ten Districts, and in Holland, France, Italy and Egypt had been ordered."

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"Ganga Ram was a great engineer," says *The Journal of Indian Engineering*, commenting on his enterprise. "He understood machinery as if he had been brought up in mechanical surroundings; he was mechanical and full of resource. He could

calculate figures in his head with great rapidity, and his quick decisions were largely due to this. He was a constructive engineer with great command of labour, because he knew how to treat labour. He had great energy and powers of work and was never intimidated by obstacles. Success for men of that stamp lies in the open market of competition, and not in the shackles of Government service, and it was when Ganga Ram was on his own that he showed himself the big man he was."

In defiance of the hot weather and the monsoon, work started in right earnest in June 1903. On the testimony of R. B. Sewak Ram, who himself was an actor in the thrilling drama of converting the fallow land of Lyallpur into flourishing fields, we have it: "Notwithstanding the fact that there was no *pucca* road, and that the nearest railway station was at a distance of twenty-five miles, so that the carriage of one boiler alone cost us Rs. 1,500, the whole work was finished in three months, and the first *rabi* crop grew on arid soil to the admiration and amazement of all."

We get a glimpse of the actual scheme in operation when we are told that: "The water supplied from the canal and lifted from eight to ten feet into a well-designed level channel especially constructed and graded at a slope of 1 in 4,000, flowed by the usual system of arterial water courses on the land to be irrigated. Carefully calculating the amount of water required, and the height of the lift, among other

things, the machinery was designed to deliver the necessary quantity in such a short time, that the utmost economy of water compatible with efficiency was ensured."

We get an idea of the cost of working this scheme in the words of Ganga Ram himself, from the evidence which he gave before the Indian Cotton Committee: "I estimate," he said, "it costs me Rs. 4 per acre to pump the water eight feet. My estate is 2,500 acres in extent. It therefore costs me Rs. 10,000 to mature all the crops. The cost of pumping ten feet is about the same as for eight feet. I have got one 14' pump and one set of 12' and 10' pumps on my estate. I pay half canal rates. All the canal rates together for flow come to Rs. 4 per acre. I pay Rs. 2 per acre lift rate. If my estate were irrigated by flow it would cost me Rs. 10,000. The Department gives me a remission of Rs. 5,000, and thus I pay Rs. 5,000. The pumping actually cost me Rs. 10,000, so that I am Rs. 5,000 to the bad. I actually pay Rs. 2 more per acre because my estate is situated on high land."

In the light of his own experience, he made discoveries which were very valuable indeed, and would have proved of far-reaching importance to farmers in the Province if the Government, besides acting as a Rent Collector, had taken some pains to broadcast the results of his experiments and encouraged smaller cultivators all over the province to work on his lines. As it was, capital was not forthcoming,

and the really remarkable results of the experiment have been confined to a comparatively small area

"I have often been told as regards my pumping scheme in Gangapur," wrote Ganga Ram, "I take more water than other zamindars, but the fact is that I take it for half the time that the other people do. This is a point to which I want to draw special attention. What I have found by experience as a cultivator is that if water is given in sufficient quantity for a less time, it goes further than a driplet all the year round. I only pump for about 160 days out of the year of 320 days on which the canal runs. This year I have not pumped for more than 120 days. This shows that, if double the quantity of water were given to each outlet, and the times were reduced to one half, you would get better duty than what you are getting now." He continued; "I advocate the modification of canal rules, so as to admit of larger supplies being given for shorter period. The word 'cusec' really means nothing. What is wanting in regard to it is to introduce one of the most important mathematical factors which is time. Some new name should be invented showing how many hours 'cusec' runs. A statement that the duty was 400 cusecs per acre does not show for how many hours the 'cusec' ran.....double the quantity of water could be given in half the time, and yet all the crops could be matured....."

These observations reflect one thing unmistakably: in the administration of the land, there was

one thing which weighed with Ganga Ram more than everything else, and that was the question of economy, the delicate balance between spending and returns which is the axis round which business success revolves. It was this drive towards economy which turned his mind more and more towards the mechanisation of as many agricultural processes as he could with facility adapt to Indian conditions.

Birth and distance separated Ganga Ram from Henry Ford and they are of two worlds, but the similarity of their views based on a similarity of experience, and the same width of vision, is striking.

"The farmer," writes Henry Ford, "makes too complex an affair out of the daily work. I believe that the average farmer puts to a really useful purpose only about five per cent of the energy that he spends. If anyone equipped a factory in the style, say, the average farm is fitted out, the place would be cluttered with men. The worst factory in Europe is hardly as bad as the average farm barn. Power is utilised to the least possible degree. Not only is everything done by hand, but seldom is a thought given to logical arrangement. A farmer doing his chores will walk up and down a rickety ladder a dozen times. He will carry water for years instead of putting in a few lengths of pipe. His whole idea, when there is extra to do is to hire a few extra men. He thinks of putting money into improvements as an expense. Farm products at their lowest prices are dearer than they ought to be. Farm profits at

their highest are lower than they ought to be. It is waste motion—waste effort—that makes farm prices high and profits low.....We have left more undone than we have done. Yet at no time—no matter what the value of the crops—have we failed to turn a first class profit (on my own farm). We are not farmers—we are industrialists on a farm. The moment the farmer considers himself as an industrialist with horror of waste, either in material or men, then we are going to have farm-products so low-priced that all will have enough to eat, and the profits will be so satisfactory that farming will be considered as one of the least hazardous and most profitable of occupations."

How Ganga Ram was concerned with applying science, and the profit method to agriculture, and in fact carrying out the same ideas of those of Henry Ford, is revealed in the story of Gangapur.

"Power farming is simply taking the burden from flesh and blood and putting it on steel. We are in the opening years of power-farming...Farming ought to be something more than a rural occupation. It ought to be the business of raising food. And when it does become a business, the actual work of farming the average sort of farm can be done in twenty-four days in a year. The other days can be given over to other kinds of business..."

—*Henry Ford.*

CHAPTER VIII

THE ROMANCE OF GANGAPUR

IT was in an atmosphere of feverish activity that the vast barren tracts of land were made fertile, and in the midst of it all grew up Gangapur, the village of Ganga Ram's dreams.

It is typical of the man that there was no halt : the two constructive designs went on side by side. Gangapur was conceived as a model village of modern design in the centre of the estate. Sanitary housing was its key-note, and the most logical method of arrangement was followed. Each caste, that is to say, each type of vocational worker, had its own quadrangle. Every effort was made to give no cause for offence on the score of religion.

In the one corner of the village was a large and comfortable bungalow, intended for visitors. Nearby were the spacious buildings of a large indoor and outdoor dispensary. A school and Post Office were also founded. On another side of the village were large godowns, an estate office, and quarters for the use of estate officials and the manager. In all his arrangements, Ganga Ram's stress was on efficiency, and by his clever location of the buildings

he saved precious time in the execution of his work.

A *chauk* two hundred feet square stood in the centre of the village, and many different kinds of shopkeepers settled there. Its amenities were increased by a very fine well that was sunk in the middle. Of a depth of 105 feet, it was constructed with Ganga Ram's patent bricks which by a simple device are riveted into one another with a brick pin, thereby ensuring better lasting power, absolute solidarity and stability and yet not costing more than two-thirds of what an ordinary well would cost. Two *pukka* tanks with taps were constructed near the well, to keep the water supply pure and to avoid contamination.

The plans of the village were very much appreciated by the authorities, civil as well as medical, and a prize of a thousand rupees was awarded to the founder. To those who understand the difficulties involved in carrying out so many improvements in such a short time, the scheme can be regarded as a really magnificent effort to bring the Indian village into line with modern improvements, and provide it with reasonable comforts. The very ease with which it was accomplished once the first drive and determination were there shows that there is little cause for despair in the millions of villages of India and that what is needed is hard work and enterprise backed up by capital investment.

In course of time, Gangapur developed into a vast living laboratory for the testing of new ideas

in agriculture. " At the home farm in Gangapur, interesting experiments are going on, and readiness to investigate new ideas and to put work and money into the development of them cannot be too highly commended. It is that combination of study and practical experiment which has hitherto been markedly a desideratum in the Punjab " wrote Mr. (now Sir) John Maynard, a very experienced Financial Commissioner of the Punjab in appreciation of what he saw during his visit.

Thousands of trees were planted, and in course of time offered their priceless boon of shade to men and cattle, supplying fuel and wood for the requirements of the cultivator, and keeping the rainfall from going below the normal. Where before had been arid, desert soil, grew up gradually the graceful Eucalyptus, Shisham and Kikar, prolific in the newly-watered soil. Simal, Tun, Jaman and Pipal added their beauty and shade to make the estate a beautiful and inviting spot.

For the growing of crops, vegetables and grasses, special attention was paid to the acclimatisation of foreign seeds, and country seed was systematically sifted and graded. Several varieties of white and yellow American maize, and Assam and Chinese Khaki cottons were acclimatised, and at one time eight different varieties of English, French, and Canadian wheats were growing side by side, with the object of choosing those which showed signs of being best suited to the climatic conditions of the district.

Experimentation went on tirelessly : there hardly seemed to be an agricultural country in the world to which Sir Ganga Ram did not look for seed or for inspiration of one kind and another. Among his more adventurous, and unfortunately unsuccessful experiments, were those on Russian linseed flax and Bengal jute.

Quite early in the experiment Ganga Ram turned his magnificently adaptable and vigorous mind to the question of vegetable production, for which he realised there was a growing market. He had seen in England, and more particularly in France and other European countries, the careful and painstaking work that was put into vegetable culture, and the fine, graded, marketable crops that resulted. He also realised that Indian vegetable growers suffered from an initial difficulty in the mixed and unreliable seed that they were provided with, and he sent to James Carter's highly efficient seed works in England for vegetable seed of many varieties, in an attempt to acclimatise them. Several varieties of peas and beans, beet, kale, cauliflower, cabbage, carrot, turnip cucumber, strawberry, onion, lettuce, melon, parsley, marrow, raddish, spinach and tomato were sown, and in most cases a very fine crop was obtained.

His method of acclimatising seed was simple and effective. In the first year seed was sown simply to make seed for the second year. All bad and diseased seed was rejected, and only a good quality

acclimatised seed was kept, which lasted for about two years after which it began to deteriorate.

The restless mind of Ganga Ram, who was a real pioneer and could never be satisfied with small gains, was always trying out new ideas. One of his experiments was with dried vegetables, a method of turning waste products into assets. In Europe, he had seen such dried vegetables having a large sale in the slack vegetable seasons, and he was sure that India, with her hundreds of out-of-the-way villages, could be a fruitful market for them. Vegetable drying therefore was carried out, and the markets in Lahore were supplied with dried vegetables to test the demand.

Seed selection was even more stringent when it came to wheat. Sometimes simple country seed was taken, and special attention was paid to its watering and bringing up. When the ears came out, a rigorous selection was carried on, and all weak, bad ears of a foreign variety were weeded out, leaving only the good quality. The seed from this acre was naturally superior and was sufficient for the sowing of several acres in the following year. Out of these several acres, one acre was again reserved for special selection, and so the seed selection went on, ensuring a bumper crop of the best selected seed. The process goes on in Gangapur year after year, and is the main reason why Gangapur wheat produce has a remarkable record of prizes at the Lyallpur Agricultural Show.

In a Press report in 1907 was the following: "In the Agricultural Show held in Lyallpur, Mr. Sewak Ram, Barrister-at-Law, Zamindar, son of Rai Bahadur Ganga Ram, C.I.E. won no less than eleven prizes, and has stood first in the Chenab Colony, having won the largest number of prizes.

He won the first prize for white country cotton, first prize for Assam cotton, first prize for maize, first prize for spices, first prize for agricultural machinery, and first prize for ploughing with Avery's plough, in competition with other foreign ploughs...."

And the next year, in 1908, it was again reported: "Gangapur again won quite a number of prizes at the Lyallpur Agricultural Show, viz., first prizes for red country cotton, foreign varieties of cotton, for spices, for different varieties of ploughs, for the best display of agricultural land implements, for country carts (*Gadda*), and for ploughing with Avery's Hindostan plough. In horse and cattle breeding, they were awarded four prizes for colts and fillies, and two prizes for bullocks, altogether thirteen prizes."

As the years went by, the shade of the Gangapur trees grew deeper, its fields more fertile, its houses more numerous, and Ganga Ram watched it grow with a growing joy, like a father seeing his child developing with an ever-deepening love and understanding. Sometimes as he looked across the wide tracts of land that had meant days and years

of unceasing care and labour he would thank God that he had been given this opportunity in the evening of his life to come away from the artificial life of the towns to a green village: the opportunity to watch barren land grow fertile, and to see hundreds of his fellow-countrymen lead a richer, easier and more scientific life under his fatherly eye. Perhaps, who knows, he loved it as he had never loved his buildings, finding peace in the soil and rest among growing things. It was as if his own soul expanded with the plants he was caring for.

In 1916, the Lieutenant-Governor of the Punjab visited the estate, and we have it on his authority that "admirable hydraulic and agricultural work is being carried out by R. B. Ganga Ram, C.I.E. and his energetic son Rai Sahib Sewak Ram in the Gangapur Estate—some 3,000 acres—and a temporarily leased area—some 8,000 acres. Our visit was full of interest and instruction.

The Rai Bahadur is the pioneer of lift irrigation worked on a large scale by steam and electric power. The village of Gangapur is an admirable example of what can be effected by the energy and enterprise of a resident landlord—I wish we had more of them—who is willing and eager to carry out agricultural improvements on his home-farm, and thus bring conviction to the tenants, who, though wedded to old methods, are willing to adopt the new, when the advantage of the latter is brought home to them by practical demonstration at their own doors....

I was particularly struck with the thoroughness and rapidity with which the 8,000 acres leased out temporarily last year has been cleared of jungle, laid out, irrigated by steam power, and made to produce a fine crop of wheat and oil seeds this *Rabi*."

Experiments in gardening were equally thorough and interesting. A big orchard, covering twelve acres, was planted on the most suitable land. The area was divided into different plots each acre being divided into four plots, and each plot having one kind of fruit.

Protection from the high winds, which is the first necessity of young trees, was ensured by the planting of a group of fast-growing trees bordering the whole area. On one side was a mulberry plantation, on two sides plantains, and *Jamoa* and *Jaman* covered the fourth side. The planting of trees in deep irrigation trenches was avoided, nor were the plants planted deeply in the soil. Care was taken by following the accepted pruning, and other methods, to produce straight and well-formed trees. Grafting, layering, budding, and the striking of cuttings were adopted according to the accepted methods, and a small nursery was planted to supply trees for the orchard.

The results of the orchard experiment are interesting, particularly in view of the rapid recent development of fruit farming, and the making of fruit products in the Punjab. It was found that the citrus group showed the best results. Large-

numbers of Malta Oranges, Desi Sangtra, Nagpuri Sangtra, Sour Lime, Sweet Lime, Kagzi Lemon, Gulgul and Pumeloe were produced, in the humid and calm atmosphere of the grove. The soil was kept constantly moist and not over-irrigated, it being found that an excess of water tended to damage the plants.

Further experiments revealed that Malta or Sangtra showed great vigour when grafted on small sour lime or *Khatti*, fruited abundantly and had long life. Those grafted on to sweet lime had a better flavour, but a shorter life. The soil was kept well cultivated, weeded, and full of air.

Plots of loquat, pomegranate, peach, plum, pear, mulberry, grape, guava, phalsa, fig, country apple, plantain, mango, ber and date were all planted, and it was discovered that pear, plum and pomegranate stood the blasts of hot wind that sometimes swept the area much better than the orange, lime loquat and mango. Mango cultivation, after a lot of time and money being wasted, was ultimately given up as unsuitable to that particular soil and climate.

The manifold and important manuring problems that face the cultivator if he is not to impoverish the soil early took the attention of Ganga Ram. Farm-yard manure, although the best, could not be obtained in sufficient quantity for all the fields. Artificial manures such as are used in Europe were found to be good but far too expensive, and the best results were obtained by sowing crops of hemp and indigo,

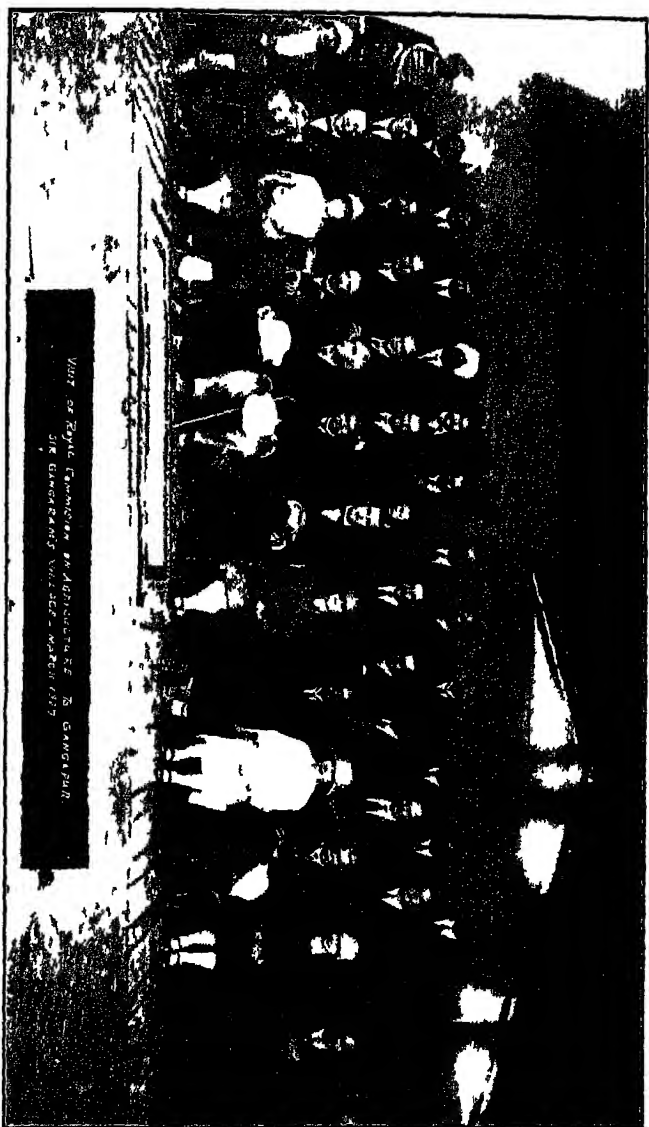
and ploughing them into the soil when they were still green. By these methods the out-turn of wheat was increased by 15 to twenty per cent. Castor plant was also sown, and ploughed in this way, and because of its rich foliage had a very beneficial effect on the soil, the crops in that acre doing particularly well. Bone manure was also tried with great success, fifty maunds of bones being crushed by hand labour.

It was also found that, when manure was not available, it was beneficial to plough the land several times before sowing a crop. Sometimes the fields were ploughed eight or ten times before wheat was sown.

Experiments in economy went hand in hand with the efforts to produce more. In 1916 Gangapur was visited by the Imperial Economic Botanist from Pusa.

"I have just spent a very interesting afternoon with Rai Sahib Sewak Ram at Gangapur," wrote Mr. Howard. "The estate is in excellent condition and is a most valuable object lesson of the advantage to India of the application of science to practice. If only we had a few hundred Zamindars like the Rai Sahib in each of the Provinces of India the work of the Agricultural Department would be made much easier.

The object of my visit was to discuss with the Rai Sahib the details of some experiments on water saving. He has agreed to my proposal and has



made some very useful suggestions on his own account. If we can save, as I expect, one third at least of the water now applied, the advantage of the Province will be enormous. I hope to visit this estate later on to see the results of the experiments which have been arranged."

Yet another line of enquiry was cattle-breeding, and it was found to be a most profitable form of farming after the preliminary investment in good stock had been made. Rai Sahib Sewak Ram himself made an intensive study of this subject during his visits to England and has some interesting remarks to make: "In England, cattle-breeding is done in a most business-like way. A person whose business is to keep cows for purposes of milk only keeps a big herd of cows, sells away the calf when it is a fortnight old, and there is another person whose business it is to keep calves up to the age of one year, and sell them to a person who keeps them to the age of two, and so on. Each one makes a speciality of his own business, and thus makes the business paying. The young stock is fed on cattle-food, and consequently there is no difficulty when weaning is done.

A good cow gives up to 60 lbs of milk a day, but for quality a Jersey cow is the best. Care is taken to see that the breed of each country is kept pure, while it is quite the reverse in India where all the breeds get mixed up."

As usual, the sight of new experiments abroad.

led to an application of the same principles in Gangapur, taking into account the peculiarities of the Indian situation, and soon the whole estate was humming with cattle-breeding activity.

Progress was steadily kept up as is revealed by the remarks of Sir Edward Maclagan, Lieutenant-Governor of the Punjab who visited the farm in 1920. He writes "I visited this village in company with Mr. Montgomery (Chief Engineer), Mr. French (Chief Secretary), Mr. Joseph (Revenue Secretary), Mr. Carrie (Deputy Commissioner Shekho Pura and Mr. Crawford (S. P. Shekho Pura). Excellent arrangements for our visit were made by Rai Bahadur Ganga Ram and Rai Bahadur Sewak Ram, and we had an opportunity of seeing the pumps (both steam and electric), the field of different kinds of wheat, the cattle and horses, the implements used, the dispensary, the arrangements for drinking water and other special features of this admirable estate. The visit was most enjoyable and instructive one and one was very glad to see the success which had attended the great experiment which the enterprising owners have here initiated. I may note that among the factors leading to the success not the least is the fact that R. B. Sewak Ram lives himself on the estate and sees to things for himself. I wish the village in the future as in the past the prosperity which it so fully deserves."

A special feature of the whole of the Gangapur enterprise was the extent to which scientific inven-

tions and machinery were used to make the project a gigantic success. "The low-lift pumping station here is well-known all over India, and I can only bear testimony to the enterprise and success of Rai Bahadur Ganga Ram and his son L. Sewak Ram" remarked a Director of Agriculture. "I was specially intersted in their new departure in the way of steam cultivating plant, and had the privilege of seeing this used for the first time in the Lyallpur district. By direct traction, using the knifer, spring lined cultivator and Cambridge roller, a piece of absolutely hard and dry land was in one operation converted into a fine tilth ready for immediate sowing."

Gangapur was the first farm to introduce a mechanical reaper and a ridger, and harrows, scythes, sprays and new type of gardening instruments were among the many modern-designed and improved tools used.

Agricultural experiments, the use of modern mechanical devices, with steam and electric power, and village planning on a most practical basis are all unique features, of striking originality and breadth of vision, and would have made the reputation of any estate, but the real triumph of Gangapur lies in yet another thing—the Trolley which connects the estate with the Railway Station.

Over a distance of two miles separating Gangapur from the Railway Station runs a two-foot wide track for a trolley which can transport passengers.

In appearance it is unassuming yet it is remarkable for the convenience it affords. Four trollies, hooked to one another, are drawn by one medium-sized pony. It is an almost frightening sight to see man after man loading himself into the trolley, and the single pony standing there looking quite unable to carry even half such a load. But the driver sits unconcerned, and by the time things are ready nearly fifty people have seated themselves on the wooden benches provided for passengers.

The driver swings his whip, and the horse pulls. Holding your breath, you expect the poor animal to fail at his gigantic task. On the contrary, the trolley moves away smoothly and swiftly and the horse gathers speed. Field after field is left behind, and the horse is still trotting and taking the curves with the ease of a Diesel engine. It is an unforgettable experience, in its way as thrilling as a first ride in the Underground Railway in London, or in the Municipal Tramway in Calcutta. And unforgettable too because it opens up a vista of quick and easy transport in hundreds and thousands of Indian villages if this plan is followed. Its potentialities in the Indian countryside are indeed revolutionary. In the words of Captain Walker, a Railway Engineer: "In a country where roads are difficult and expensive to construct and almost impossible to maintain in good order, the idea of constructing light tramways is no doubt a good solution of the transport problem.....these tramway lines have been very

successful in Italy, where, I believe, the Government gives special concessions in the nature of free land by the side of the road."

Wide stretches of land, as far as the eye can see, form the Indian countryside. Clusters of mud houses, small, of simple design, and shaded by trees stand exquisite in their natural setting. But behind this perspective of peace and beauty lie the stark realities of a life grim with the problems of hunger and poverty, which harry the Indian peasant night and day. Isolated by the long distances of the country, he is cut away from the world of new ideas, and an easy prey of any petty tyrant who may set himself up as a "big man" in the village.

Lack of communications is the root cause of the ignorance of the Indian villager, and one of the main reasons for his helplessness.

Radio, Telephone, Cinema, and Airplane have all helped to break down feelings of narrow nationalism, and, in India, the work of the humble "motor lorry" has been equally valuable in opening up new areas, far away from the Railway line. The network of bus services, often rickety and uncomfortable, has done more to create a new link between the town and the village than any other single agency of our civilisation.

But the problem of linking up village with village still looms before us as a grave problem, yet a problem, demanding solution since it directly affects economic conditions of life and the cultural

outlook of more than eighty out of every hundred men who live in our country.

It is towards the solution of this problem in all its magnitude, that Ganga Ram has contributed the plan of running horse-drawn country tramways. It is not a Utopian solution but it has been found eminently workable, easy to construct and to maintain, efficient and economical in use.

In the extensive use of such a tramway connecting villages with one another, and providing a ready means of transport for men and materials, we can see a solution of one of the most urgent problems of our country-life, and an indispensable factor if the marketing of village industrial products is to have any significance in the India of to-morrow.

"I visited Gangapur on 4th April, 1928," wrote Lord Irwin, the then Viceroy, "and was greatly interested in all I saw. The estate is managed in a way which reflects great credit on its owner and is an object lesson in the possibilities of Indian agriculture. I wish it all prosperity."

Truly enough when the annals of New India and her agricultural progress come to be written, the experiment of Gangapur will stand out as a magnificent pioneering experiment in new and better methods of cultivation and living.

**" The man who is too set to change is dead already.
The funeral is a mere detail."**

—*Henry Ford*

CHAPTER IX

"LIGHT MORE LIGHT"

THE success of Gangapur was not the end of the journey to Ganga Ram, but only the beginning. Achievements were noted, filed in his amazing memory; failures were likewise noted and not repeated. Ceaselessly the process of selection and improvement went on. Every year the tireless eyes of the old engineer scanned the seed catalogues, noted any new agricultural machinery or methods that was coming into use in the West, always keeping watch on anything practicable for his own project.

In the hot weather of 1910, he made up his mind to make a tour of England with a view to study at first-hand the latest developments in mechanical farming. At that time, farm machinery was rapidly changing the face of many countries. Rural England was being affected, and the age-old wasteful methods eliminated; in America vast arid semi-desert tracts were being turned into wheat-growing areas by means of new mechanical devices. The impact of science and engineering on agriculture was tending to lessen hazards, and put steam and

electric power, and petrol-driven engines in place of men. Ganga Ram watched the signs with interest: he decided it was time that he went and saw the process in operation himself.

"We covered nearly 15,000 miles and saw farms of every type and description, but the great object of our tour was to enquire about and inspect agricultural machinery. We purchased nearly £2,000 worth of machinery and implements, many of which are quite new to Indian agriculture" wrote Lala Sewak Ram, his eldest son, who accompanied him, and to whose notes we are indebted for this detailed narrative.

"After seeing the wonderful seed stores of James Carter and Company, at Raynes Park, London, we started our tour in the direction of Guildford, and passed on our way a place called Godalming where we inspected a new farm of intensive gardening. We told the Proprietor of the farm that we were interested in the intensive system of French gardening. He praised the system and also explained his own system in which he used canvas covers instead of glass covers, and instead of filling vegetable trenches with expensive manure, he ran hot water pipes under the beds to help mature the crops."

The details of the tour are fascinating. At every step Ganga Ram was acutely conscious that he was witnessing a change in the production of fundamental crops which was as revolutionary as the change in the production of commodities for use at the time



AT THE PARIS EXHIBITION

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of the Industrial Revolution. All over the countryside, once the home of reaction, were springing up new factories for the production of agricultural machinery. In his mind's eye he could see the backward Indian countryside, where the production of the most precious of foods, the wheat, the rice, and the pulses, is left in the hands of the most backward, and the illiterate. And then with that visionary eye that gave him his tremendous and infectious optimism, he thought of the day when the countryside would be ploughed and reaped with a minimum of human sweat, and a maximum of human profit, when across the plains would be a network of factories for producing agricultural machinery, and a network of Institutes for helping and advising the cultivator about seed and animals and the manifold problems of farming.

The future.....it meant new standards in an old land. It meant education for the farmer, for the meanest agricultural labourer, a new generation of men who would understand a machine as now they understood a bullock.

"From Godalming, we went to see Wallis and Stevens Works at Basingstoke, where they mostly make direct traction engines and ploughs. They gave us a demonstration of ploughing being done by the direct traction system.

At Reading we saw the Agricultural College, and the farm and horticultural and agricultural works undertaken by Prof. Percival," he continues.

"I had a letter of introduction, from the Secretary of the Royal Agricultural Society of England to Mr. Arthur Stratton, of Alton Priors near Pewsey in Wiltshire. His farm is indeed remarkable, and one of the best-managed we saw. He has got twenty-six large steam engines besides implements of every description at work..... He spared no pains in showing us his farm down to the smallest details. On the following day, he took us to Devizes to see the market day of an English country town. Market day is a most interesting time for the English farmer, as well as being a busy day. The farmers bring their horses, cows, sheep, samples of grain, and the dealers in machinery exhibit the different kinds of agricultural machinery constructed in that particular district. Sales take place privately, and by auction. Such market days are fixed in all big towns. The introduction of this system in India would certainly be a great boon to agriculturalists.

From there we went to Cirencester to see the Royal Agricultural College, their dairy, and the experimental farm, next going to Stourbridge, where we went through the seed stores of Webb and Sons. We particularly noticed that all varieties of wheat were cleaned before selling, and the factory was as big as a flour mill in India.

From Worcester, where we saw Larkworthy's works and their colonial adjustable harrows, and Birmingham, where we visited Pitman's vegetable drying and nutmeal making works, we went to

Uttoxeter and inspected Bamford's agricultural machinery works, where chaff cutters, oil cake mills, wheat grinding mills, root cutters, corn crushers, turnip cutters and mowers were among the many kinds of labour-saving devices we saw.

From Liverpool and its huge grain elevators we went to various other machinery works, and to the Agricultural College at Leeds where we had a most interesting talk with Professor Seaton.

Our tour was continued in Scotland. At Glasgow we saw the works and implements of Wallace and Company, the makers of Raja reapers, winnowers and ploughs. We also saw McNeill's Works, and their sugar-making plant which was most instructive. We also visited the University College in Edinburgh.

From there we returned south. We stayed at Boon to see a big sheep farm owned by Mr. S. Gibb. Then we crossed over to Newcastle-on-Tyne, where we saw a big Agricultural College under the guidance of Professor Gilchrist. Nearby were Blaydon's Manure Works, and at York we also saw some splendid manure works belonging to Henry Richardson and Company."

The list of works and factories continues from Hull to Lincoln, Newark, Peterboro, to Bedford and Luton. At each place the name of the works and the kind of machinery manufactured there is noted with great care for detail.

“At all the agricultural colleges I have named,” continues Sewak Ram, “we had the pleasure of meeting various professors and discussing agricultural problems with them and visiting their experimental farms, but after considerable discussion, we came to the conclusion that, although the education imparted there is very good, the laboratories excellent, and the crop and manure experiments most instructive, it was better in the first place for an Indian student to be trained at one of the Indian colleges, rather than rush to England for instruction. In the first place, the practical agriculture taught in India is applied to the crops and soils in India ; in the second place, it takes into account the peculiar climatic and labour conditions there. After being qualified in India, it would no doubt be beneficial for the student to go to England as an apprentice to some clever and up-to-date farmer to learn methods of farm management, the use of various kinds of agricultural machinery, and the application of new agricultural and horticultural methods.”

On the subject of agricultural appliances, they were in agreement. Having seen the extent to which steam, electric and oil power was used in Europe, they both came to attach the greatest importance to these methods of ploughing, especially steam ploughing. They fully saw that with the increase in wages, the dearth of cultivators due to the opening up of new tracts and also on account of the necessity of making full use of rain water in *barani* areas, the

introduction of steam ploughing into India was absolutely necessary.

So ended a three-dimensional tour of England—in farms, factories and colleges—that had covered the country from North to South, with the same painstaking thoroughness and enthusiasm that had marked Ganga Ram out since he was quite a young man. There was no slackening in the desire to learn, no tiring of that eager and appreciative mind.

And when the owner and his son returned, Gangapur gleamed with new machines, the faces of its cultivators shone with excitement as they realised that a new servant—steam power—had come to help them in their daily tasks. Gangapur was no longer an experiment: it was a successful village, and the most progressive in the Province.

"Is it not rather that science evokes in us a deeper sense of awe? Does not each of her new advances gain for us a step in that stairway of rock which all must climb who desire to look from the mountain tops of the spirit upon the Promised Land of Truth?"

—*Sir Jagadish Chandra Bose.*

CHAPTER X

THE RENALA EXPERIMENT

GANGA RAM, at the age of sixty, still remained a student; he was daily learning new lessons and exploring new fields. It is, therefore, not surprising that his English visit gave fresh stimulus to his eager and enterprising spirit, and that he came back full of new plans for the agricultural prosperity of the Province. It was to the utilisation of Hydro-Electric power that he turned his attention.

Back home, he focussed his terrific mental energies on working out a scheme for the utilisation of "the power obtainable from canal falls, which, for fifty years or so, if it was utilised at all was used—particularly on the Upper Bari Doab Canal—for corn-grinding mills. The mills, let on lease, brought some return to the Government, and were appreciated by the people, but he claimed that they were no solution of how to use the vast amount of energy going to waste.

The first attempt to use such power for a large industrial concern was at Dhariwal on the Bari Doab Canal, but there, owing to the intermittent nature of the power, a steam installation had also to be

employed. Sir Thomas Higham, after his retirement, thought of utilising the power of the falls for industrial purposes by electrical transmission, but his concession was given on harsh terms, industries gave no response, and he failed.

In fact, it was evident that, with canals liable to closure after heavy rainfall when the crops required no water, the power for the falls could only be used economically for agriculture. Ganga Ram realised this point at once, and turned it to very good purpose. He used and developed a new idea of his in order to bring the power of low falls into use, claiming for it a large field of research."

The utilisation of the power running to waste at the many canal falls in the Punjab became the chief centre of his thought and imagination. He realised the limitations of such power, owing to its interrupted character, and that it could not be used with benefit for industrial enterprises. But he also realised with great clarity that this periodical closure of the canal was of no consequence in the case of agriculture. In any case emergent closures were so rare as to be negligible and in the time of heavy rainfall they were only closed when the crops had so much rain water that they were independent of other irrigation. If, due to general lowness of the rivers supplying the canals, the branches have to be closed, the crops are usually hard enough to stand the slight irregularity and in any case crops watered by lift irrigation can stand the strain equally well.

For agriculture, therefore, Ganga Ram concluded, closures were not of great importance, and he regarded the lifting of water by means of the power generated at canal falls as a most practical proposition.

The plans for the new experiment were prepared with great precision, and he opened negotiations with the Punjab Government on the new project. "He applied for a grant of 5,000 acres of waste land in the Gujranwala district on payment of a fair market value. The electric energy he proposed to generate from a fall on one of the new canals of the Triple series, and he was willing to pay a reasonable rate for the water power. He stipulated, however, that as the land was of indifferent quality, he should be allowed the use of canal water in the *kharif* season for the first few years, for the value of the silt, and to assist in the development of the land while the wells were being sunk and the machinery erected. The condition he proposed for his own fulfilment was that he should bring fifty per cent. of the area under *rabi* cultivation by means of mechanical lift, unaided by animal power, at the end of five years, failing which the land could be resumed by the Government, without any claim on his part for compensation for the capital expenditure he had incurred. These conditions formed the basis of discussion, and they would not appear to be unreasonable. Indeed the water power, for a purpose it was so desirable to encourage, might well have been given free for the first few

of a great wheat farm run to engineering and business principles, a farm where man-power would be used only to drive machinery. To launch such a project would have required hundreds and thousands of dollars, and I did not have that much money. Spurred by the world cry for wheat (after the War) I set about a way to apply my true and tried philosophy to supply the demand."

The dream materialised for the Government, trusting the young man with ideas and facts to back them up, gave him every facility, and the bankers financed him, after an interview of only twenty minutes!

"With the capital provided by these bankers, we went to work to grow wheat on a big scale. Under my contract with the Government, I selected two hundred thousand acres on two Indian reservations. The Indians had not been cultivating this land, and it was all virgin prairie. The contract provided that the Indians receive a share of all the crops raised, and that the land, with the improvements that were made, was to revert to them at the expiration of the lease."

The whole scheme of Campbell, which began originally in 1918, was launched through Secretary Lane of the Department of the Interior, and Mr. J. P. Morgan and his associates in New York, and the idea was to get enough wheat for a country whose agricultural labour had been taken away either to the battlefields or to the munition factories which

offered high wages.

How he succeeded is a wonderful story in itself, and too long to give in details, says his biographer Hazel Manley, but it was through the direct help of President Wilson, and Secretary Lane and the New York bankers that the scheme was brought to fruition and that 110,000 acres of desolate prairie were transformed into the wonderful wheat field that points the way out of the economic morass threatening American agriculture.

Mr. Campbell was not an ordinary farmer, as his records show. He was a modern farmer, who looked upon farming as a manufacturing process, and his farm machinery as the machinery of a factory. That was why he studied engineering as a preparation for farming, and became one of the most romantic figures in the world of American agriculture and industry. "Born in a sod hut in the Red River Valley in North Dakota, reared on a pioneer farm in that same valley, working from childhood at the hard tasks of that life, finally he went through the University of North Dakota, and took a post-graduate course at Cornell in mechanical and electrical engineering. Then he went back to the soil where he applied his psychology of modern science and modern business methods to the oldest industry of civilised man."

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Ganga Ram bided his time. He was not the man to be deterred from his objective, and discourage-

ment could not attack his innermost being. The land had to be developed : God had helped him before and if it was His will the work would go on. He had the fibre of the pioneer in his making.

The year was 1917. The Great War was proceeding on its disastrous way. Empires were shaking, and the struggle for existence was becoming grimmer every day. Each belligerent country was mobilising its man-power for the final pull. In India recruitment was being pushed ahead at a forced pace. Punjab had become the field of intensive activity. Men had to be mobilised at all costs, and promises had to be made to tempt the peasant into the fighting line. The Government soon realised that a peasant, with the love of land in his bones, can most readily be moved by the prospect of getting land.

In the Russian Revolution Lenin used the slogan "Land to the Peasant " and wiped the great Romanov Empire off the face of Russia, and in India the promise of land to the soldiers on their triumphant return home moved the peasants in their thousands to spill their blood and sacrifice their lives.

It was only in 1917 that the Lieutenant-Governor of the Punjab seemed to have realised that the promises already extended exceeded the land available, on their return, for the demobilised soldiers. The authorities did not know which way to turn. And it was then that Ganga Ram saw his opportunity and stepped into the breach.

His new proposals were that he should be given

23,000 acres of high level land in the Bari Doab. The lower Bari Doab canal irrigated the area, but the tract which he wanted could only be watered by lift.

"Hitherto, in the grants made to him, the land was his own provided he fulfilled the conditions, but in this instance the stipulations were that, at the end of three years, he would return the land to the Government fully equipped with the necessary irrigation channels and machinery in order that it might be available for colonisation to the returned soldiers."

It was a daring venture, and to the Government it appeared too good to be true. The Financial Commissioner, Sir John Maynard is said to have had long consultations with the Lieutenant-Governor. For some time they vacillated and considered the scheme so fantastic that they wanted to save Ganga Ram from himself. But the veteran of Gangapur stood firm in his resolve. Perhaps in normal times his proposals would have met with the fate of the Gujranwala project, but this time it was the Government that had put itself in a tight corner. Necessity proverbially knows no law, and they finally decided to let Ganga Ram have his way.

With so short a lease before him, and expenditure on equipment which was estimated to amount to several lacs of rupees, Ganga Ram this time was, to all appearances, riding for a fall. But the Government had not sufficiently estimated his great powers

of resistance, and his marvellous mathematical brain. There is no doubt that if he had not been sure of his ultimate success, taking natural hazards into account, he would never have taken on such a gigantic scheme.

As soon as the cards were in his hands, he played them with consummate skill. With economy as his watchword, he controlled even the minutest claim for expense in the matter of equipment. He was helped on the credit side by the unusually high prices of agricultural products that were the result of war scarcity.....and, finally, aided by his professional skill and business talent, Ganga Ram once again triumphed. All the contract conditions were fulfilled, and in his own pocket was a substantial profit that was to form the basis of his munificent charities.

Where had been desert, jungle, unwanted, uncultivated land, stretched well-irrigated tracts of rich soil waiting for crops and tenants. It must have been with ill-concealed emotion that the mellow kind face of the ageing man looked upon the ripe crops and realised that in his evening hours the work of his brain had produced fertile land for hundreds and thousands, and added to the richness of his Province and his country. There was no measure for his achievement in terms of money, for wheat is more precious than money, and cultivable soil cannot be bought for mere gold. For they are the fuel of life itself, man's motive force, his driving power, his home and his future.

When the Government realised that the seemingly impossible task was really going to be accomplished, they decided that they would entrust Ganga Ram with still more land to fulfil their growing need of land for soldiers. The scheme had still to reach completion but enough had been done to show them that their first trust had not been misplaced.

The second lease was of some 40,000 acres of high land, unirrigable by gravity, for a period of seven years, and the lessee was required to provide for the cultivation of the land by hydro-electric machinery. Their terms of the contract this time were even more stringent. On the expiration of the seven years period, he had to restore the land to the Government for colonisation fully equipped with the necessary canals and distributing channels, and the hydro-electric plant complete in full working order, for lifting water for the irrigation of the tract concerned. The contract appeared at first sight to be in every way to the advantage of the Government, with little or no possible profit for the lessee. The Government merely lost the use of the land for a few years, and on the termination of the lease was to gain the equipment of irrigating channels and the lift plant without incurring any cost or any risk.

We have freely drawn from the *Indian Journal of Engineering* for the following description, in technical detail, of what came to be known as the Renala Hydro-Electric scheme.

Daring in its conception, a hydro-electric scheme

for lifting water to high land was very exceptional in India, showing the way towards a very wide field of expansion of lift irrigation in India generally. The land in question was not only high and unirrigable by flow, but was irregular in level and was divided up into a number of plots, each being supplied with water from an individual pumping station. The water was led for the pumping station in channels from the canal, and in a few cases there were successive lifts with intermediate distribution of water. The design and lay-out of the project was carried out by Ganga Ram, assisted by the P. W. D. engineers, Major John Ashford, Superintendent of the Amritsar Workshops and Mr. Crump of the Punjab Irrigation Department. At the beginning, Ganga Ram used steam-driven pumps as a temporary measure, while he studied how he might make use of the nearest fall on the Lower Bari Doab Canals as the source of hydro-electric power for operating the system in accordance with the terms of his lease. As a result of these studies he finally entered into a contract with the hydro-electric department of Messrs. Vickers, Ltd., and they were engaged in carrying out the equipping of the installation.

Finally, a hydro-electric station was constructed on the canal at a point near Renala Khurd Station on the North Western Railway. From it, in accordance with the designs, transmission lines radiate both up-stream and down-stream, the total length of these lines being thirty miles. Steel poles were

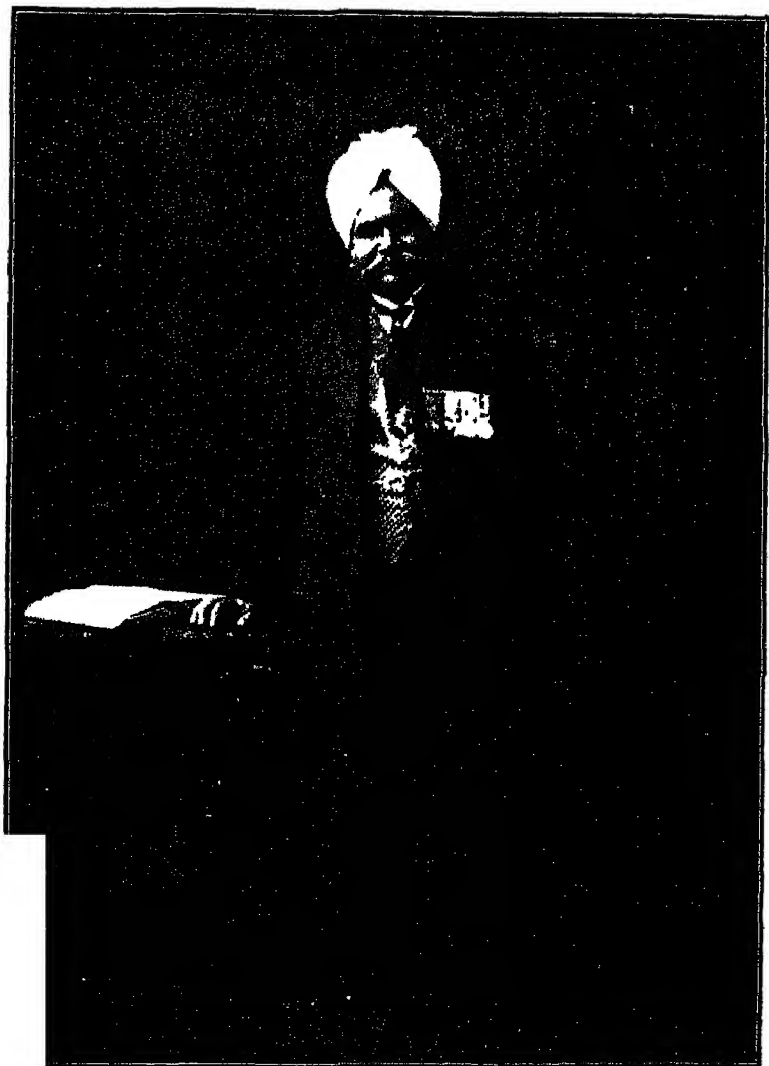
provided throughout, and a telephone system connected all the main points....

At Renala, the site of the power house, the canal had a fall of only two feet, but it was found possible by regrading the channel to convert the fall to one of six feet. Even six feet is a low fall for economical turbine design, and special turbines of horizontal type had to be designed....It was not a simple work, and, stout-hearted as Ganga Ram always was, it is believed it gave him considerable anxiety and that many hours and days were spent in mental worry and calculations. The time element was against him. The conditions binding him were severe: he had to complete the whole scheme before April 1925, and it was stipulated that, in the event of his death or failure to carry out the contract, Government would resume the land and charge penal rates for the harvests collected.

Ganga Ram, therefore, all the more deserved to be congratulated in that he scored yet another success. The finished project was opened by the Governor of the Punjab in 1925, in the spring. Looking at the relevant figures of the scheme, we can realise its gigantic proportions. Five turbines, 220 k.w., commanded about 80,000 acres or 125 square miles. The cost of the installation was nearly half a crore and Rs. 12 lacs were spent on 75 miles of irrigating channels, 626 miles of watercourses, 45 bridges, 565 miles of village roads, 121 miles of boundary roads, 121 outles, and 640 culverts. About

Rs. 10 lacs were spent on the steam machinery used for the lift prior to the completion of the hydro-electric plant, and up to the *rabi* of 1924, the Government were paid Rs. 12 lacs in revenue rates. From the engineering point of view Renala works stand unique in their distinction of harnessing energy from the smallest fall in the world. The Government were therefore presented with very valuable property, and Ganga Ram had every reason to be proud of the splendid work he had done, one which few, if any, men in India could have carried to completion with equal success.

"The story of his development of 80,000 acres of waste land in the Montgomery District," says Dr. Lucas, "reads like a romance. He made careful notes of unused machinery rusting in Bombay. He seized the opportunity towards the close of the late war, when wheat was in such demand, to press the Government to give him the opportunity to bring machinery and brains to bear upon the unused land in order to help and win the war. It was a daring conception, and there were so many obstacles placed in the way that a man of less courage and patience would have given up. Within a few years these 80,000 acres had been turned from a burning desert into rich farming land. A man who can bring such things to pass and then take his money and use it for the blessing and improvement of humanity is a great man."



SIR GANGA RAM—1923

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In the meantime, Ganga Ram, having reached his seventieth year, had gone a long way towards the spending of the millions he had made. He was very close to the three million mark which he was to give away before he crossed the borders of the Great Beyond.

In 1922 he was recommended for a knighthood, by Sir Edward Maclagan, who was then Governor of the Punjab. "My object," he says, "in recommending him for a knighthood was to secure verification for scientific and philanthropic work done for the benefit of the Province outside the sphere of the politics of the day."

He received the news of the honour conferred on him when he was in England arranging for the hydro-electric machinery required for the work in Renala.

If there was anybody who deserved to be decorated for his achievements, Ganga Ram was indeed that man. At the opening of the Renala Works, Sir Malcolm Hailey, speaking in words that revealed a real and affectionate understanding of his character and work, said "If we congratulate Sir Ganga Ram on his success in completing this great work, and appreciate the important addition he has made to the material wealth of the Province, we shall not have any feeling of envy or jealousy. For, if he wins like a hero, he spends like a saint. It has always been a mystery to me how a man of so soft a heart can possess so business-like a head. Long after he

has left this scene of his labour—and may that day be long distant—thousands will remember his philanthropy with gratitude, and, recall his name with affection and honour.”

“If he wins like a hero, he spends like a saint.” The words have become classic, and they perhaps summarise the true spirit of his life better than any others have done.

**"You, Sir, talk of Culture, Culture. I know only
of one Culture, and that is agriculture."**

—Sir Ganga Ram.

CHAPTER XI

SON OF THE SOIL

THE man who had heroically conquered the difficulties of Renala did not win through the great trials of his life because he had a dowser's wand in his hand, and sensed his way to victory. He was able to achieve what to others appeared unimaginable, because he had very definite ideas on agriculture, matured by experience. It might almost be said that he had a "theory of agriculture", to which he referred all the problems of the land as they occurred.

Ganga Ram was always acutely conscious of the pivotal position agriculture held in India, which affected not thousands but millions, and he always saw his own comparatively small experiments in the light of the greater whole.

Night and day he had laboured on his land, and he had seen the agony of the Indian peasant in his everyday life. He had seen the fear that came on their faces when they heard of the day when the Revenue Officer was due to arrive. He knew how they dreaded the shame and distress that were the inevitable accompaniments of the collection of Land Revenue.

Once an Oxford research scholar interested in the agricultural conditions of the East, and having spent more than three years in China, arrived in India to see the countryside for himself. He went to a village accompanied by an Indian interpreter, and asked a group of peasants some questions on the Land Revenue, and their attitude to it. "Sahib," they said in the course of their reply, "you should come and see us when the Revenue is being collected." It was a simple answer, but it opened to the eyes of the visitor the world of poverty and helplessness that encompasses the villager about, leaving him at the mercy of the fall of prices, the weather, and the hundred and one little calamities that fall on the peasant's head.

Ganga Ram had put all his fiery energy into solving the misery of these poor exploited sons of the soil. He had studied the question of Land Revenue and Water Rates, and the problem of subsidiary occupations, and he had come to his own conclusions.

We cannot do better than let him speak for himself, in his own straightforward words, which are as fresh and thought-inspiring now, and as applicable to the conditions of the country, as on the day when they were written. They will be treasured even when India has worked out her national destiny on the higher planes of economic and political emancipation.

'The attention of the whole country," he said,

while addressing a very select gathering in Simla, "is nowadays riveted on the Montford Reforms Scheme. But to my mind the study and amelioration of the physical condition of the people of the country is a necessary prelude to the safe initiation and ultimate success of the scheme. A person with an empty stomach can hardly bestow his thoughts upon his political status. Political rights have no meaning to him who seldom knows what it is to take two full meals a day. Yet such, in fact, is the deplorable condition of the vast majority of the Indian masses, who are to exercise their right of voting in one form or another. It is preposterous to expect these men, most of whom find it impossible to satisfy even their stomach cravings, to make a correct use of the franchise which will be extended to them. Since 72 per cent of the population directly, and 28 per cent indirectly, are dependent on agriculture, its extension and development in all directions is the only means to fill this gap of food. Therefore, with a view to win over the sympathy and co-operation of my countrymen, of whom some of the most distinguished are present among us, to the consideration of one of the most potent factors in the amelioration of the condition of the Indian peasant, I take the liberty of reading this paper.

" Some eminent Indian economists like the late Mr. Dadabhai Naoroji, the late Mr. Romesh Chander Dutta, and Mr. Digby, have discussed the question of the poverty of India on pessimistic lines, but I

prefer to sound an optimistic note. In order, therefore, to examine impartially and dispassionately the proposition that the bulk of the Indian population not only suffer from a chronic deficiency of food, but are existing in a condition verging on starvation, I have determined to approach the question from a totally different standpoint and, by first working out the food requirements of the population in cereals only, and comparing these with the ascertained production of these commodities, to place the result before you for such inferences and conclusions as you may consider warranted. My figures are taken entirely from the various Blue Books issued under the authority of the Government of India, and are not based merely on assumptions or suppositions. My figures of population are in all cases taken from the Census Report of 1911."

He had prepared a table showing the population of India classified according to age, the estimated quantity of food required for each person of the specified age per head, and the total quantity of food required for the whole population. "It might be urged," he said, "and with considerable force, that the average of 16 oz. per head per day which I have assumed for the adult population of India will not, ordinarily, suffice for the total rural adult population and still less for the male portion thereof. I, therefore, allow an additional quantity of 8 oz. per head per day to the male adult rural population of the country.

In addition to this, some allowance must be made for sweets, etc., which form an important element of consumption at marriages and similar festive occasions.

For this purpose, I have taken an average of 1 oz. per head per day. This gives us a total quantity of 3,208,008 tons for the whole of India for one year.

My calculation would, however, be incomplete, unless I were to take into account the quantity of food which falls under the denomination of wastage. I do not think I should be far out if I set down 10 per cent on the total consumption to be wasted. After making a further addition of 4,556,240 tons on this account, we arrive at the conclusion that for human consumption alone 50,118,640 tons are required for the whole population of India for one year. But there are several other purposes for which cereals are used. They form a part of the requirements of cattle and horses, and about two million tons must, of necessity, be kept stored for seed for the next year.

About five million tons of cereals are exported annually from the country. Exports are unavoidable and indispensable, in order partly to provide for funds to buy imported necessities and luxuries of life, and partly to meet obligations on account of home charges.

Thus we see that in round numbers we require 77 million tons of cereals to meet our demands for one year.

Having made this computation of our requirements, let us now cast a glance on the other side of the picture and endeavour to ascertain the resources that are available to meet this colossal obligation.

We are producing, in a normal year, about 77 million tons, which is just enough to meet our requirements with no surplus to meet the contingency of a failure of the rains in the ensuing year.

The rate of food consumption per head which I have adopted as the basis of my calculations, both in the case of human beings and animals is taken on very cautious lines—in fact my rates are the minimum indispensable for bare existence; and my estimates if anything, err in the direction of being in defect and not in excess.

There are a hundred and one other purposes not touched upon by me for which cereals are utilised. In the case of animals also I have taken the minimum quantity at which their consumption could be estimated, and have, moreover, disregarded the grain consumed by such domestic animals as poultry, birds, and pariah dogs and wild animals.

By way of comparison, it may here be remarked that the quantity of wheat consumed in the United Kingdom is approximately 12 ozs. per head, it will, I think, be conceded that my estimate of consumption for the Indian population whose staple food is a cereal of one sort or another is not extravagant....for in the United Kingdom meat enters very largely into the dietary of the people, as well as a number

of other things."

We are thus faced with a precarious balance between production and consumption, which leaves us at the mercy of drought, crop disease, and natural calamities. Thus the whole country is at the mercy of famine, and, since the rich never tighten their belts, in a lean year it is the poor who must, of necessity, starve.

Therefore, he argued, the key to better living lay in better farming, and better farming could never be ensured until there was a greater incentive to produce bigger and better crops. The peasant is only prepared to produce more if he has the guarantee that he will enjoy the fruit of his extra labours. Under the present system of Revenue collection there was no such guarantee, since the more work he put in, and the better crops he produced, the more highly he was taxed, and he was in positive fear of producing more for fear the Patwari assessed him highly.

The radical reform he therefore pleaded, in the interest of land improvements, was the abolition of Land Revenue. As he did not want the State to suffer financially in this, he proposed a very ingenious scheme for a substitute for Land Revenue. The scheme was divided into two parts: firstly, the peasant was to purchase complete proprietary rights over his land and exemption from Land Revenue, by means of a lump payment spread over thirty years; secondly, the money so realised by the Government

was to be deposited in special Industrial Banks, and the interest on this money alone, he calculated in great detail, would come to more than the Land Revenue even at the beginning of the scheme, and if the money was properly managed, would, after a few years, be yielding the Government an income for in excess of the ordinary Land Revenue.

This scheme did away with the necessity of recurrent Land Settlements which the peasants dreaded above everything, and which were a great retarding factor in agricultural prosperity. His evidence on this point before the Industrial Commission speaks for his schemes better than mere description can do:

Pandit Madan Mohan Malaviya, questioning; "And now, as regards this novel scheme of yours about the redemption of Land Revenue, it seems on the face of it an excellent scheme. But do you think that people will be willing to pay the necessary price to acquire a permanent, revenue-free proprietorship in the land on the plan you have suggested?"

Ganga Ram: "I think so. Whomever I have talked to seemed to be very eager to avail themselves of the opportunity of becoming proprietors of land. They say that improvements in the land are simply retarded on account of the dread of settlement that hangs over their heads."

Q.—You expect that in all parts of the Province people will welcome such a scheme?

A.—Yes, but I recommend it being started with

caution, and from the bottom. I do not recommend that its advantages should be given to big *zamindars* to start with; but it will be a very great boon to the peasants who are small land-holders.

Q.—As regards that question of the purchase (commutation) of Land Revenue, I thought there was a little misunderstanding in what you said. Of course, the ordinary cultivators in the Province are already proprietors, except to a small extent, in the canal colonies.

A.—In the canal colonies they are full proprietors now. Of course, they pay the Land Revenue.

Pandit Madan Mohan Malaviya: "I understood your scheme to mean that, after they have paid the price of the land, they will not have to pay Land Revenue."

A.—The price of redemption. They are already proprietors of the Land.

Q.—But they have to pay the revenue year after year? Your proposal is that they should pay for, say thirty years, revenue, and should never be asked to pay revenue again. That is what you mean by their becoming proprietors of the land.

A.—They are proprietors already. They only buy up the Government right in the land. The land revenue is only supposed to be a share in the produce of the land.

The Hon'ble Sir R. N. Mukerjee—Only for the surface rights, and not for the minerals?

A.—No, you can reserve the mineral rights.

Hon'ble Sir H. J. Maynard—I think you said that this would cause them to take an abiding interest in the land. Don't you think that they take an abiding interest in the land already?

A.—They do not. My experience and also my information from good sources are that generally it takes five years to do the Settlement, and when the Settlement period is coming to a close, five years before that they begin to lose heart, and try to produce as little as possible, so that the next five years he does still less, so you lose the potentiality of the land.

Q.—You know that in calculating future Land Revenue, the average on which we calculate is spread over very much more than five years?

A.—So much the more unfortunate, because if they know how many years it will spread over that date, they will lose heart over it.

Q.—The great disadvantage of a recurring settlement is this feeling of uncertainty, and a tendency not to produce much?

A.—Yes. What I did say was, supposing you give this privilege, it would result in this, that from the same land from which they are producing ten maunds per acre now, I am sure they can produce thirty maunds per acre. It is only a question of the number of harrowings, and the amount of labour they devote to it.

Q.—Do you think that the amount of labour will be necessarily given?

A.—Certainly, because there would be no Patwari to make a report which would go against them in the next settlement.

Q.—In regard to the matter of sinking wells, do you think that the impending settlement has any effect?

A.—Certainly, although I am aware that for thirty years he is protected from enhancement of Revenue.

Mr. C. E. Low.—Do you consider that in Provinces which are not liable to a revision of assessment, a great deal more money is spent on improvement of land?

A.—No. I can safely say, if I may without meaning any disrespect to anyone, that in permanent settlement there is less attention paid, because the *zamindars* really take the last drop of blood out of the tenant.

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It is interesting to note in this connection that his feelings about the *zamindars* were not a matter of secrecy: "Whenever he met me," wrote Sir Sitaram in U. P. "he used to twit the U. P. *zamindars* on their laziness and want of enterprise. In fact, he had a poor opinion of the U. P. *zamindars* as a class whose sole business it was, according to him, to become rent collectors. He used to tell me how agriculture could be made to pay. He used to tell me about his wheat, his sugar, and molass-coated fodder for cattle. He gave me figures of how he

had invested in land, and extracted a hundred-fold out of it."

We can compare this with the remarks of Mr. C. H. Hill, Revenue and Agriculture Member of the Council of the Government of India, when he visited the Gangapur estate: "If only other large-landed proprietors—more particularly in the U. P.—would follow in the Rai Bahadur's footsteps, they would not only be profiting themselves, but would also have the satisfaction that they were revolutionising, or helping to revolutionise, the economic condition of Indian agriculture."

Next to the problem of Revenue came the problem of water and the rotation of crops, upon which success of crop-growing also depended. Water is the life-blood of agriculture, and Ganga Ram, with his rare combination of minute practical study and statistical data at his finger tips, had framed proposals which are far too valuable to be overlooked by those who are interested in the scientific approach to the problems of the soil and its culture:

"The first and foremost point to which I should draw the attention of the Cotton Committee," he said, in his evidence before that body, "is the desirability of extending *kharif* cultivation by bringing as much water in the canals during *kharif* as the Department can possibly do. I was surprised to hear in the Wheat Conference held in Simla from the two Chief Engineers in the Punjab that, even with the present sanctioning of canals, they could bring more

water, but that there was no demand. I have something to say with regard to this demand:

(1) Let water rates on all fodder crops, grown as *kharif* crops be remitted, such as *juar*, *gwara*, etc., the loss being made up by raising the rates on more profitable crops. This is very important from the *zamindar's* point of view as the absence of good fodder greatly handicaps the breed of good cattle on which all agricultural operations depend.

(2) No charge should be made if *kharif* water is used for ploughing lands, whether followed by *rabbi* or not.

On the subject of apportioning areas to different crops, in reply to Mr. W. Roberts he said: "My general idea is that to increase cotton cultivation, you will have to partly decrease the area under wheat. Since it is not desirable that the area under foodstuffs should decrease, it should therefore be possible by increasing the supply of water in *kharif* to grow more coarse grains to take the place of wheat. What you lose in food-stuffs in *rabbi*, you will gain in food-stuffs in the *kharif*. For instance, if you give one watering to gram in September, and let it take care of itself, I think 70 per cent or 80 per cent will be matured. No *rabbi* watering would be required. I strongly advocate that the system of one watering should be adopted for gram. I also advocate that more *juar* should be grown and allowed to ripen, so that the grain can be used as a food, and the *karbi* (stalks) as winter fodder. That is the reason why

I strongly advocate the increase of the *kharif* water supply. In my opinion, there is plenty of room for more intensive cropping, especially if you allow for mixed cropping."

The procedure adopted by the Government with regard to the water supply in the Canal Colonies came in for criticism: "The great mistake which was made in the Chenab Colony," he said, 'was that it was given out that the *rabbi* would be $\frac{3}{5}$ ths and the *kharif* $\frac{2}{5}$ ths. People began to work on that basis." The state of water in the rivers would have justified exactly the reverse, i.e., the *kharifs* should have been $\frac{3}{5}$ ths and the *rabbi* $\frac{2}{5}$ ths. The only remedy now is to give more water in the *kharif* and to take land out of *rabbi* cultivation. As to the statement that there is no demand for water in *kharif*, I beg to say that I have had conversation with several *zamindars*, and as a body they assert that they cannot get enough water in *kharif*.

"If you ask any *zamindars*, you would get the same reply. If water were given liberally for ploughing *rabbi* and nothing were said about what charge would be made for it, water would be saved in *rabbi*, and better results would be obtained. Land which is ploughed up for the *rabbi* in the *kharif* season gives a better yield."

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About cotton-growing, he had very definite views. He considered it a very sound proposition for the Province, and particularly in relation to the

hill areas: "If Government were to grant more liberal terms to the *zamindars* in the hills, I think they could grow very large quantities of cotton there. I have seen cotton growing in the hills, and consider that large areas would be available for cotton cultivation there, with profit both to Government and the *zamindars* who are very poor. Co-operative societies should buy such *kapas* from them."

Shrewd agriculturist as he was, Ganga Ram realised the vast untapped potentialities of hill cultivation. He realised that most of the land lying waste could be made fertile with the right treatment and the right crops, but his plans for cotton cultivation await the arrival of another Ganga Ram who may come and re-enact Renala on the untilled hill-sides of the Province.

He suggested that "long staple cotton, such as Roseum, in the Central Provinces, should be acclimatised and experimented upon by the Agricultural Department, so that it can be profitably introduced in *barani* lands....." also that "suitable cotton seeds should be discovered for hills, and that *zamindars* should be encouraged to sow suitable varieties of cotton in the hills. Arrangements should be made through the Co-operative societies to supply them with good seed and to buy their products."

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The problems of the Forest Department also received his careful scrutiny. He pleaded for "more favourable rules as to grazing, and more extended

use of forest leaves as manure " and complained against the Forest Department "against whose sluggishness, obstruction, and oppression I have made serious complaints."

The question of fuel was at that time assuming the most serious proportions, and deforestation and its baleful consequences had become an issue of real gravity. A fuel shortage had suddenly dawned on the people, and thought was being given all over the Province as to the best method of providing for the future wood supply of the Punjab without harming the forests in any way. The Industrial Commission in particular was examining this question, and the Rai Bahadur got the opportunity of laying before them the result of his enquiries, and also of expressing his honest view-point about the activities of the Forest Department. A man of Ganga Ram's calibre could always be depended upon to tell the truth however unpleasant it might be:

The Honble Mr. H. J. Maynard—As regards fuel, I think you mention the fact that fuel is more or less exhausted.

A.—Yes.

Q.—Do you know that about 40,000 acres of irrigated plantation have just been established by the Department, in order to meet provincial requirements?

A.—I shall quote, if I may, the authority of Booth-Tucker, who has had considerable experience of this. The Forest Department would not deviate

from the old lines, and would not try to discover anything that may be more conducive to bringing about the desired results. Booth-Tucker's own expression—he gave me this information—is “I am going to try on my own land. There is a certain class of eucalyptus which can be grown in five years, which makes very good fuel, and which is grown in Australia.” I asked him “Why do you not suggest to the Forest Department to grow this?”

He replied: “Whoever heard of the Forest Department trying a new thing?”

Q.—But still, you do know that 40,000 acres have been put under fuel with the object of meeting the fuel requirements of the Province?

A.—Yes, that is why I mention that if they went about it in the right way, perhaps that 40,000 acres would go long enough; but if they simply put in the old-fashioned things, it will not bring any better results.

Q.—You mean the growing of *shisham*?

A.—Yes, and those other things in the Changa-manga forest. If you give me that land, I will give you twice the money they are realising. They are not producing fuel enough for that area. I would buy for that twice the amount of coal.

Q.—We were told by a witness the other day, in connection with this matter of wood, that he wanted mulberry wood, and had great difficulty in getting it.

A.—I was present here and was glad to get that

information from him. There is absolutely no difficulty in growing mulberry. It is the fastest-growing tree. *Zamindars* don't grow it because it invites birds; but it can be grown in groves to any extent."

Although he was always ready to adopt new ideas and new schemes, and his mind was very flexible, he had no contempt for the old where it was of value and the result of experience. Balance was the keynote of his character. His opinion about the different ploughs in use in India is a very striking example of this trait in his character. An ex-Minister of the Punjab Government, himself an agriculturist of vast experience, is responsible for a remarkable statement: "I asked his opinion," he said, "about the various kinds of ploughs, Meston, Rajah, etc. He told me that he had tried all ploughs, and he had come to the conclusion that the country plough that had been evolved in India by thousands of years of experience was the best suited for our soil. Although modern scientific experiments greatly stress the need of ploughs which turn the land upside down, yet I feel there is a mine of wisdom in what Sir Ganga Ram said and I knew that he spoke with authority after years of experience."

Experience too had given him his faith in agriculture, and everyone who came into contact with him was fired by his infectious enthusiasm in the land.

It was because he believed in it so much that

he pleaded again and again for the appointment of a Royal Commission on Agriculture. He was probably the one man who did more than anybody else to create the demand for such a Commission. If he spoke at the Gaity Theatre, Simla, he ended with a plea for it, and he constantly prompted friends and colleagues to educate public opinion in the matter, and bring pressure on the authorities.

The urgency of India's agricultural problem to him admitted of no delay. He could see his own life slipping away, and he wished to communicate that sense of urgency to others before it was too late. The land, the land.....its urgent needs, and the needs of those who lived by it. It never left his mind. It was as if every plant and tree in Gangapur, and every crop on the new lands he had created, was urging him on to see this work, at least, finished before he left the world.

At last, in 1925, the Commission was appointed. Sir Ganga Ram was to be the Senior Indian Member. Although at that time he was seventy-four years of age, and conscious of failing health, he had not the heart to refuse to serve, and turn away the child of his dreams because age weighed heavily upon him. It would not have been Ganga Ram, the hero of many struggles and the realiser of many dreams, to refuse such an invitation on the grounds of age. For his spirit was still young within him, and the call of duty still admitted of no denial.

**" Still I must not honour a man more than I honour
truth, but must utter what I have to say."**

—Plato.

CHAPTER XII

GANGA RAM AND GANDHI

“**H**AS it ever occurred to you,” wrote Ganga Ram to Gandhi “while you are travelling from Bombay *via* B. B. & C. I. to Delhi that an area of 500 miles long and twenty miles wide is absolute desolation, and just think that all that area, multiplied by the rainfall, would amount to several crores of cubic feet of water, but it passes in the shape of floods to the sea.... We do not avail ourselves of the gifts of nature, and allow an enormous volume of water to go waste.

“If that land was simply cut up by ploughs or by tractor ploughs,” he continued, “so as to intercept the rainfall, little shrubs and grass will grow over them and will easily admit to enormous wealth in the shape of cattle and sheep-breeding. I should like to have your opinion in this matter. There are several other points on which I should like to get your opinion, all calculated to increase the wealth of the masses on which alone, in my humble opinion, our future political *swaraj* is dependant.”

There was extensive correspondence between Ganga Ram and Mahatma Gandhi, and both were

eager to impress each other with their way of looking at things. Ganga Ram knew that if he could convert Mahatma Gandhi to his views, he would be able to give a re-orientation to the problem of re-building India. For, even in the early nineteen-twenties, when the memories of Jallianwala Bagh massacre were still green in people's memories, it was Mahatma Gandhi who when he spoke touched the national headlines. It was he alone who had all the resurgent forces of the rising people within his grip.

The two had never met, and when Ganga Ram, as a member of the Royal Commission was proceeding to Poona he seized the opportunity of extending an invitation to the Mahatma ; "I shall be extremely obliged," he wrote, "if you will come to meet me in Poona. Although you will not give evidence, it will be useful for you to learn what wealth lies in agriculture, if you will only come to watch the proceedings of the Commission." He added a note on his favourite subject of food production: "From the literature that has come from Bombay, I learn that there is tremendous ignorance about agriculture in Bombay Presidency. People do not seem to know even the rudiments of agriculture, and I am sure the production can easily be doubled if they pursue the lessons which I hope to give when I arrive. I am extremely anxious that you should hear my cross-examination of the officials who are coming to Poona, so that you may learn for yourself what ignorance there is in the point of agriculture, and how the

production of cereals in your Presidency may be almost doubled."

Talking about his own work with the Commission, he informed the Mahatma that:

"I am going to place before the Commission two most important questions, namely, (1) to stop fragmentation of the land. People go on dividing land to keep up their hereditary right, but the area is often not large enough to get any good from the mother land by ploughing it, and my own proposal is that we should bring about a law in supersession of the Hindu and Muhammadan Law so that at the moment the land comes to a minimum of one or two-plough land, the law of nomination or the law of primogeniture should prevail and no further fragmentation should take place. You must have noticed in the Viceroy's speech that he pointedly refers to the fragmentation, and I think the way I propose to solve the problem is that a law could be introduced by which this problem could be solved."

Gandhi did not find it possible to attend the Commission, but the zeal of Ganga Ram in correspondence did not diminish. The subjects of correspondence covered a vast field, but the most frequent references were about new occupations for the masses of India, and exploring new avenues for earning livelihood.

Ganga Ram's observations on the prospects of Dairy Farming are characteristic of the thoroughness with which he examined new projects, and how he

brought his trained statistical brain to bear on them.

"A Milk Dairy which is so much talked about," he wrote, "will never pay in this country to either Hindus or Muhammadans, and will only pay if run on the lines of a European trader, Kaventer, who has got a Dairy in Simla. He keeps cows, buffaloes, and pigs. Cows' milk he sells to the public for drinking purposes, of buffaloes' milk he makes butter, and gives skim milk to the pigs, who really become fat on this food, and all the remainings of cows and buffaloes are also eaten by pigs. He makes more money by the Pork Sausage which he sells for annas 12 a pound, and consequently makes more money from by-products than from milk and butter."

The problem of cow protection (which is the bugbear of communal unity) formed the subject of another letter which challenges the old ways of thought :

"The cattle problem is no doubt a very important problem, but not in the way you think. It is part and parcel of my programme, and I will let you know later what I can do for it. There is no question of sustained education, but the stomach is the centre of gravitation round which everything revolves.

"Have you ever given your earnest thought to the question of cow-slaughter in the following way:—

" 'Why are cows slaughtered in preference to goats and sheep?'

"My answer is that it pays the butcher to sell

beef at a very cheap price, because hides, horns, and hoofs are sufficient to pay them, and since they get these milch cows very cheaply, it pays them to do the work.

“The military soldiers are supplied with beef simply because people in their zeal to get fresh milk for themselves and their children, buy cows, and when the cows get dry they cannot afford to keep them in the towns, where Re. 1 a day is the lowest figure at which a cow can be kept. Therefore the only remedy is to move the Government to give lands, if they have Crown lands, or acquire land for this purpose where a small organisation can keep dry cows at a very nominal rate, like, say, Rs. 10, for the dry period, and then no man, whether Hindu or Muhammadan, will ever sell milch cows, if he can cover the dry period by paying Rs. 10 only. This will leave beef-eaters only one source, namely to pay a very high price for good animals.

“This is a very important question, and, if something could be done on these lines, any amount of money would be forthcoming from Hindus. At present the so-called Gaushalas are simply butchers’ places, where to keep cows is gross cruelty.

“If you take up the cause in that light—namely to provide grazing grounds, where one-half the area could be used for raising crops, and the other half grass, you would do immense good to the community.

“It is no good appealing to the Government on the grounds of sentiment, and I will give you a small

instance of service I rendered in the war-time.

"I was in Lahore in those days, when Rally's agent came to me, who was doing cotton business with me, and he said he was extremely busy in buying hides and skins, and that the market in Lahore had gone up 250 maunds a day. I wondered and asked the reason. 'Because,' he said, 'the hides and skins are now selling for Rs. 72, instead of Rs. 36, which used to be before, and the price of horns and hoofs has also correspondingly been raised.'

"I made a careful note of the weight of each component part of cow and bull and their price, and I found that it could pay butchers even if they bought a cow or bull for Rs. 50. I at once went to my friend, Sir Thomas Holland, who was in charge of the Munitions Board, and I represented to him that if this thing went on agricultural bullocks would all be sold, and people would be deprived of their only means of subsistence. He went into my calculations, and agreed with me that such was the case. He immediately took action, and ordered his Department to bring down the price from Rs. 72 to Rs. 36.

"Down went the market again. Rally's man came to me and said, 'What have you done, Sir? The market for hides has gone down tremendously, and we cannot now meet our bargains which we had made before at high prices.' Thus you will see that, by this practical method, you can save a large number of cows.

"Thus you will see that all these economic

questions are not based on sentiment. I should like to have your views on this subject, because I want to move this matter before the Commission, so that we can set apart such grazing grounds near the towns for the use of Hindus and Muhammadans."

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An exchange of opinions between Ganga Ram and Gandhi on agricultural subjects went on for a long time, but the first real clash of opinion came when they began to discuss "spinning economics." Ganga Ram with his belief in the machine, stood poles apart from the gospel of handspinning, and he had little sympathy with *charkha* as the symbol of the national liberation movement. He examined spinning purely in the light of its economic potentialities, and on that the two great ones could never agree.

Ganga Ram had one great belief, and he expressed it forcefully: "The entire question of the country's political emancipation is hinged upon the stomach of the masses, which at present is empty. Everything gravitates round it, and the remedy lies in the *industrialisation* of the country."

And it was there that Gandhi smiled, and went his own way, seeing in factories a torment, and in the spinning wheel the healthy, natural way to national regeneration.

"In my opinion," Ganga Ram continued in his letters to Gandhi Ji, "spinning can never pay, although weaving can pay. About the spinning wheel, let me tell you that the income from working the

spinning wheel all day is not more than an anna and a half. Who will work for the sake of that petty amount? I have started in Lahore an Industrial School for girls and women, and by the aid of the Sewing Machine and the Embroidery Machine I guarantee that any woman learning at that school for one year is in a position to earn a rupee a day, and if she remains for two years, I guarantee two rupees a day. One of our girls, fifteen years old, after a training of one year, has become so expert in the art of embroidery that she can now earn Rs. 3 to Rs. 4 a day by working about six hours a day. Who will, under these circumstances, like to work a spinning wheel all the day for the sake of an anna or two?

"You will be only too pleased to see our city school, if you ever happen to come to the Punjab side. In order to give them facilities of finding a ready sale, I have opened a shop in which I supply them raw material at cost price, and immediately buy their out-turn, leaving them a fair wage, and then I take the responsibility of selling it in this shop.

"I have also provided a series of central workshops all over the city, where women who cannot afford to buy machinery come and work all day with the raw materials issued to them and in return they take a good wage home. Then, under these circumstances, is it not visionary on your part to think of the spinning wheel as a subsidiary occupation? Hand-spinning cannot possibly compete with

machinery, and there are hundreds of machines like that which can be introduced to produce a fair wage for male or female when he, or she, is at leisure."

Not willing only to talk and argue, Ganga Ram got down to hard facts by sending him a *chaddar* made by a girl in the Industrial School, with the accompanying remarks: "One girl with two years' training can make two such *chaddars* in a day on an embroidery machine, costing Rs. 500, and can earn easily Re. 1 to Re. 1-8-0 a day because she can make two in a day. Although this machine costs Rs. 500 but when the cost is spread over a large number of such *chaddars*, it can be eliminated by charging say, one pice, for the use of the machine on the co-operative system. The proper course for introducing cottage industries is to give them up-to-date machines of various sorts on the co-operative system, and to enable them to earn at least annas 8 to Re. 1 per day. The work of the healthy co-operative societies is not to establish hand-spinning, which is an old-fashioned idea, but to provide machines which are up-to-date on hire-purchase system or on a very nominal rent. I have just received particulars of an English machine by which one can make a rug in two hours, of hessian cloth.

"Pandit Madan Mohan Malaviya is here," he went on, "and I have at least converted him to my way of thinking, that any labour on *charkha* is simply time lost, and without any profit while on an

up-to-date machine such things can be made by which a person can easily make annas eight to one rupee a day."

"I have no doubt that weaving would pay very handsomely" continued Ganga Ram, "if it were done on the Salvation Army model of handlooms. These handlooms ought to have been given from the funds which you collected, namely one crore of rupees, which has simply gone to idlers and lazy beggars, and the starting of impossible institutions, and has been simply wasted.

"I believe the price of these handlooms is not very much. Even if they cost Rs. 50 each, with one crore of rupees you would have bought 200,000 handlooms, and perhaps 300,000 if bought on such a large scale. This would have done an immense amount of good to the people by this way of spending...."

He next criticised the argument of extra income which the peasant must earn to make both ends meet. "I am quite aware," he said, "of the necessity of subsidiary occupations for the peasantry, but the spinning wheel is not the solution.... You say that 85 per cent of the peasantry is out of occupation for a greater part of the year, and specially when there are rains.... Sheep-breeding is a source of immense wealth, and will give full occupation to the peasantry if their ordinary work of agriculture leaves them at leisure."

Ganga Ram revealed his courage in these letters. He disagreed on a major point with the Mahatma,

who was guiding the nation's destiny, and he regarded it as his duty to carry on a controversy on the point. It did not matter to him how great the man was with whom he was arguing,—even if he was the idol of the masses, he felt that he must tell him the truth *as he saw it*. When the Mahatma showed consummate patience, and persistence in supporting his own particular views, Ganga Ram was irritated.

“Although you give me word that you are not a visionary,” he at last wrote to Mahatma Gandhi, “I think this is the very word which is applicable to you.....From all you say, it makes me yearn for an opportunity to meet you and to drive away all your old-fashioned ideas.....For the good of the masses, it is extremely important that I should educate you in the new up-to-date methods of making wealth for the masses, rather than advocating the old idea of spinning.”

Gandhi, with his proverbial calm, wrote back, “I know that you are actuated, no matter what language you use, by just as honest a motive as I claim”.....and later, “I know that though you are performing the impossible task of going from top to bottom your idea is identical with mine—*i.e.*—to serve the masses.” And to this Ganga Ram retorted with a gleam of his robust humour “And I consider that this polite language of yours has led astray the masses of India.”

After all this, there was not much common ground left between them, but Ganga Ram was not

the man to give up hope of achieving the impossible by converting the Saint of Sabarmati. An opportunity arose when he was on the point of sailing for England in connection with his work on the Royal Commission. "Gandhi Ji happened to be in Bombay, and" says Sir C. V. Mehta, "I was happy to be the means of getting Mahatma Gandhi and Ganga Ram together, and, though no agreement could be arrived at in regard to spinning as a cottage industry, I was glad to take part in their conversation."

So Ganga Ram and Gandhi could only agree to differ, but it is characteristic of Gandhi Ji that, when he heard of the sad news of his sudden death in England he published the following tribute in his paper *Young India* written with the golden touch characteristic of him :

"I had the privilege of coming into fair contact with him recently. And though we could not agree on several matters, I recognised in him a sincere reformer and a great worker. And, although, with all due respect to his age and experience, I expressed my dissent from many of his views with energy and insistence, his affection for me, whom he regarded comparatively to him as a young man of but yesterday, grew with my opposition to some of his extraordinary views on Indian poverty. He was so eager for long discussions with me, and so hopeful of weaning me from the error of my ways, that he offered to take me to England at his own expense, and promised to drive all the nonsense out of my

head. Though I could not accept the offer, which he had seriously meant, I wrote to him on the eve of his departure, promising to see him and convert him to the creed of the spinning wheel, which he thought was fit only to be burnt as fire-wood. The reader may well imagine my grief therefore over the news of his sudden death. But it is a death that we could all wish to have. For he went to England, not on a pleasure trip, but on what he considered to be a peremptory duty. He has therefore died in harness. India has every reason to be proud of having a man like Sir Ganga Ram as one of her distinguished sons. I tender both my congratulations and condolences to the family of the deceased reformer."

" But if one has visions of service, if one has vast plans which no ordinary resources could possibly realise, if one has a safe ambition to make the industrial desert bloom like the rose, and the work-a-day life suddenly blossom into fresh and enthusiastic human motives of higher character and efficiency, than one sees in large sums of money what the farmer sees in his seed corn—the beginning of new and richer harvests whose benefits can no more be selfishly confined than can the sun's rays."

—*Henry Ford.*

CHAPTER XIII

IDEAS FOR INDUSTRY

ALTHOUGH Ganga Ram's money came from the farm, he had devoted hours of thought and study to the problems of the factory. He was fully alive to the close link that binds agriculture to industry, and he recognised them as the twin pillars upon which stands, delicately balanced, a nation's prosperity.

The sphere of his own activity in factory life was limited, but his interest in industry far outstripped his actual practical experiments in that field.

While still in the service of the Patiala State, he came to be associated with the Marwar Bank as its chairman, and took a leading hand in the formation of the Bhupendra Flour Mills at Bhatinda. As his own agricultural work developed, he felt the necessity of opening cotton-pressing and ginning mills to meet the demands of the cotton which grew on his own fields. This part of his work he delegated to his second son, Lala Balak Ram, who shouldered the responsibility of assisting his father in his commercial ventures. With three factories to manage, he had a good deal of work on his hands.

Sir Ganga Ram could not enter any new sphere of life without studying it, and mastering its details. Once he had turned his attention to industry, he reviewed the whole field with a view to future possibilities. By degrees he gained such a mastery over his subject that he was called on by the Industrial Commission of 1918, and he put forward suggestions in his evidence which, in the light of twenty years' subsequent industrial development, have proved eminently practicable. Once again, by the vast scope and the minute detail of his suggestions he proved his extraordinary ability.

His first critical suggestion before the Commission was about the necessity of controlling ginning factories in India. "Cotton-ginning and pressing in the Punjab," he told them, "is being overdone in places, so much so that the factory owners find themselves under the necessity of resorting to combination in various forms, like the pool system, joint purchase, etc. This enables them to make some factories shut down, and earn their profits from such combination funds. This is a system which should be discouraged, and, if necessary, prohibited by law, because the producer pays for the factories lying idle.

No cotton-ginning factory should be allowed to be started in future without the sanction of the Director of Industries who should see before according sanction whether the produce of the cotton in the district justifies a new factory. 1,500 maunds

of *Kapas*, or 100 bales of lint per machine should be the standard."

He was of the opinion that far more Government aid should be given to industries than was already the case, and, of all the methods of Government aid, he recommended the hire-purchase system on sufficient security, and the Government lien on the factory, until the Government debt was discharged. "But the trouble, I can say from experience," he continued, "is not to find capital for starting a concern, but to find money at reasonable rates of interest for the working capital. Government can greatly help in this matter if money is advanced on the security of landed property, and house property, under adequate margin."

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In the sphere of banking, he had learned bitter lessons from the economic blizzard which shook the structure of Punjab finance to its roots, and he expressed himself in favour of State control. He insisted on a direct link between State and industry in the matter of finance, and he also thought it was necessary to further indigenous banking under proper safeguards..... "In banking, I have had a little experience as Chairman of the Marwar Bank, which went into liquidation during the great banking crisis. As Chairman of this Bank I came into contact with several small industrial concerns. Speaking generally, no industry can be started or kept going without financial help from banks, and no banks can prosper

in this country unless they get substantial financial help from the Government.

The growth and spread of indigenous banks is absolutely necessary, as they alone can reach the masses....but in order that the defects of indigenous banks which recently came to light may not be repeated, I propose the establishment of one Central Industrial Bank in each province. These Central Banks should be under semi-Government auditors, and have Government Directors on their Board..... These provincial banks should act for education. All indigenous banks should be affiliated to the Central Bank who should have full control over them. The Provincial Industrial Bank should advance money to indigenous banks subject to proper safeguards, and the affiliated banks should be left to deal direct with trade and industries."

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About cottage industries his opinions were even more definite, and he put them into practice whenever he got the chance, encouraging young men to take a new line, helping the villagers with whom he came into contact, and through his industrial schools and widow homes helping the helpless women of the country to become independent and able to stand on their own feet. Home industry was to him one of the major elements in the conquering of India's terrible poverty, and it can safely be said, that next to a radical reconstruction of agriculture, he regarded the development of modern home in-

dustries with simple machines as of the greatest economic importance to the country as a whole.

His ideas on the subject of these subsidiary occupations was eminently practical, and he realised that distribution of the finished article presented even greater problems than its production. For this reason, he recommended the introduction of co-operative Societies to develop cottage industries such as envelope-making, sock-making, weaving, lace-making, rope-making, etc. The function of the societies should be, in his view, to supply raw materials (in the case of weaving and sock-making, yarn), and afterwards to take the finished products either buying them outright, or advancing money against them, settling the amounts after sale.

"You have spoken of co-operative societies being established to promote industries" he was asked. "Do you refer to hand-loom weaving?" "I am not certain whether it would be restricted to hand-loom weaving" was his reply. "My own opinion is that a small-power machine weaving will pay in the end much more than hand-loom weaving. For instance, Huxley's weaving mill started by, say, one or more horse-power engine will prove in the end much more economical than hand-weaving. There is very great room for it. If yarns were supplied to the people, and if their produce were taken, the co-operative system could be brought into action in this way."

But he realised acutely in all his plans that, un-

less outside factors were taken into consideration in this world of cut-throat competition, the growth of Indian industry would be severely handicapped from the beginning. "One thing" he said, "has brought industrial development to continental countries, and the U.S.A. and Japan, and that is the power to regulate their own tariff of customs." This matter was not within the scope of the Industrial Commission, and he contended himself with saying pointedly that "it is at the root of all industrial progress," and the wish that the Commission would attempt to influence the Home Government to allow India to impose such duties for articles consumed in India, in relation to what was produced here. "Our first attempt should be to supply our own wants, without going to foreign markets. At present there are hundreds of things required by us, of which raw materials are exported from this country, and are re-imported after manufacture from foreign countries. *I would have no objection in this respect to give a preferential tariff to Great Britain, provided we received reciprocal treatment.*

In putting forward the suggestion of reciprocal trade rights between England and India, he anticipated the Ottawa Agreement by more than a decade.

For the development of industry in alliance with agriculture he had many new suggestions to offer. He asked for the establishment and encouragement of certain model factories which, in his opinion,

would help to quicken industrial development. "A demonstration factory of cane-crushing by an oil engine for making *gur* is very necessary. There is a factory like this in Poona. The general spread of such factories all over the Province will give a great impetus to the cultivation of sugar-cane, just as cotton-ginning has done to the growth of cotton. Refining factories for making sugar out of *gur* will then spring up at the chief centres."

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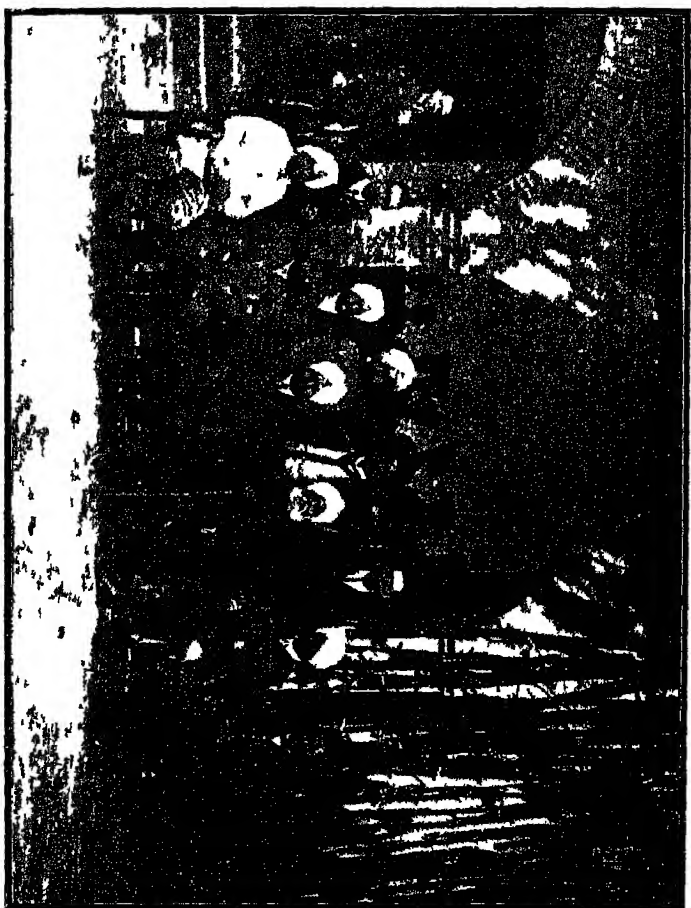
Coming back to his favourite subject of small industries, he outlined the experiments which he had already been instrumental in making in Lahore. "In the Victoria Diamond Jubilee Technical Institute Lahore, of which I am the President," he said, "we have established a research branch with a grant given by the Punjab Government, and for the last eighteen months have been investigating the recipes for different small industries, and these we have been teaching to the public. (See Appendix No. 2 at the end of the book.)

"These are small industries of a general nature, and a few of them are such as can be taken up as cottage industries. We have been trying to teach them free of any charges, but so far only three or four of them have been taken up not for want of inclination or capital (as very little is required) but for want of organisation. In this respect, Government aid might prove useful. Commercial museums should be established all over the country, there

should be a central one for the Province, with branches at the headquarters of each district."

He was of the opinion that, production difficulties having been overcome, Government assistance in the marketing of products was absolutely essential. He was always emphasising the advertising aspect of trade, and the need to make products better known, and he considered that it was essential for Government departments to aid young industries by giving them the chance to compete with foreign products, the method he proposed being that the various departments should advertise their needs well in advance, so that new producers could know what things were likely to be needed and produce accordingly. "All Government Departments should be warned" he recommended especially to the Railway Stores, the Public Works Department, the Army Stores, the Medical Stores, the Government Stationery Department, "that their requirements should be advertised freely for six months in the Trade Journals before indents on England or other countries were passed. There should be one central buying agency for all Provinces, like the Munition Board recently started by the Government, to which all applications for stores should be made."

Herein lay the germ of a plan which, if adopted, would have directly hit foreign imports and would [have considerably affected England's balance of trade so far as India was concerned. If the Government of India had chosen to adopt this innocent-



ON AN INSPECTION ROUND

looking clause, it would have meant a tremendous fillip to the production of *Swadeshi* goods.

Another of his suggestions, concerned with the very important work of maintaining the quality of *Swadeshi* goods was that a Government analyst should be appointed to give his advice free of charge on any product. This man would help the manufacturers, and also the Stores Department in its buying responsibilities.

"An even more important piece of advice that he gave was for a Director of Industries, separate from the Director of Agriculture, without any further delay. There should be a Board of Industries with executive and controlling powers. The Director of Industries should be an official with business habits. I do not see how a business expert can advise on all industries."

It is due to this suggestion that the Punjab to-day has its separate office of the Director of Industries, just as it is due to his efforts that a Faculty of Agriculture was introduced into the Punjab University. "There must be an Imperial Department, and Director-General of Industries," he advocated, "so that the activities of several provinces can be correlated. Cottage industries should be a branch of this department, as they urgently need developing."

With regard to cottage industries, he had several specific recommendations to make, of special industries which he had seen working out successfully. They were making socks *banians*, and

envelopes and weaving cloth from yarn.

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The growth of industries is connected intimately with the growth of transport facilities. The Industrial Revolution in the West applied its newly-found power as much to transport as to the production of commodities, and the whole world economy is affected by quick and efficient transport. Of the railways he had several complaints to make: "The railway freights to the seaports are reasonable," he said, "but for internal trade they are very heavy. It costs a farmer as much to send his wheat 200 miles inland as it does to send it 800 miles to a seaport." This prevents people from making the internal trade that they would normally do, and agriculture does not take up scientific improvements to increase crops, etc. It also prevents districts where there is a plentiful crop from sharing their produce with a less fortunately situated area. He therefore recommended that the railway rates should be decided upon by a Board, on which trade representatives had a voice.

Taking a concrete instance of the tendency of the railways to disregard developments in trade, he said that the growing oil industry was very much handicapped because there were no suitable waggons or ships to carry oil in bulk. "The oil industry," he pointed out, "is the one industry which should be encouraged, because we want cakes for cattle and for manure. It can be immensely developed if Government adopts the suggestions of making

tank-wagons and ships, and also if a pioneer industry is established for making tins."

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There were many who gave evidence before the Commission who considered that jail products were a source of unfair competition, but Sir Ganga Ram was convinced that the opposite was the case, in addition to the fact that the technical skill acquired by prisoners tended to make them into better and more useful citizens. "There is unnecessary hue and cry raised against jail competition" he said to the Commission. "In my opinion, jail industries are very good training for labour which would otherwise remain a drag on society and turn into confirmed brutes. I have observed the jail administration for nearly twenty years of the period of my service. I have always been of the opinion that it is a mistake to give prisoners hard labour like wheat-grinding. It has no deterrent effect on habitual convicts. Encouraging small industries in jails would have a great civilising influence on the criminal population, and a little training in any particular industry will train their minds and hands to industrial labour. But for the carpet weaving started in the Central Jail, Lahore there would have been no carpet industry in the Punjab. It was Mr. Blake, Deputy Superintendent Central Jail, who, on retirement from service, carried the experience of carpet industry in the Lahore Central Jail and caused the establishment of a carpet factory in Amritsar.

Carpet-making, brick-making, printing and chintz-printing were, he considered, all suitable industries for the Jail population.

As a practical industrialist he also realised acutely the lack of skilled labour in the country, and he, in his search for efficiency, was always on the look-out for new and sensible methods of education. Like so many others who have studied this problem, he blamed the present system of bookish education with no particular aims, not only for not fitting the students for an industrial life, but also with actually spoiling children who came of good artisan and craft families. He suggested the overhaul of the whole curriculum in the schools for those who ultimately would follow a vocational career.

Getting down to fundamentals, he told the Commission in his opinion, "Primary education will greatly help Industrial development: it will train the brain to understand things better, but Primary Education should include a little drawing and the use of scales. My practical experience is rather unfortunate. I have seen sons of artisans and sons of labourers employed in industries, if sent to school, get a sort of abhorrence of manual labour, and generally seek employment as *chaprasis*, gate-keepers on canals, or forest guards in the Forest Department. On such a post they get good perquisites over and above their pay, and have a practically easy life. But of course it is undeniable that a little education, especially if it is attended with a little drawing, even

to the extent of the use of scales, goes a long way towards opening a workman's mind. *The present syllabus of primary education will have to be considerably modified for the workmen class.*

"The Industrial Schools," he considered, "should be under the control of the Department of Industries, but should be allowed to remain under the management of the Department of Education. In fact, both Departments should pull in harmony and unison."

The questions which were asked him on this point further elucidate his position :

Q.—"You suggest that the present syllabus of primary education will have to be considerably modified for the workman class. In what direction? In the direction of giving an industrial turn to education ?

A.—Yes, industrial and commercial.

Q.—Drawing and manual training, and a little elementary chemistry and physics ?

A.—No, only drawing and manual training. Once you introduce other subjects, you don't know where you are. I would confine it to elementary drawing chiefly.

Q.—Are there many industrial schools in the Punjab ?

A.—There are a good many attached to different schools.

Q.—Why have they failed ?

A.—Simply because they are trying to teach things which it is impossible for a boy to learn. To

begin with, they start boys of the upper artisan class with carpentry. Unless a man is born carpenter, he cannot be a good carpenter. Such is my long experience.

Q.—Do you think that the selection of boys is to blame?

A.—No, but instead of wasting their time in teaching them carpentry, if they taught them drawing or some elementary thing, which would open their minds to grasp details of anything of the industrial line, it would be much better."

His views on industry, like his views on agriculture, reflected his great originality of outlook, and his grasp of practical detail. Sir Ganga Ram's intellect was that rare combination of breadth and depth—a width of vision unsurpassed in his day, and a knowledge of detail that would have put many a paper theorist to shame. After studying his opinions and controversies, this amazing intellect is the chief impression left on one's mind.

Many were the young students who came into contact with his vibrant personality, full of optimism for the material future of India, and not one went away who was not richer for his contact with that mind, visioning the future, and yet so helpful in the every-day details worrying a young man's mind—the problem of his bread, and the homely details of providing for his training. It was this combination of the wide grasp of events and projects, with an intense love and care for details that proved to be the "open sesame" to his millions.

" The cultivation of the personal life is the foundation of all. It is impossible that when the foundation is disorderly, the superstructure can be orderly. There has never been a tree whose trunk is slender and whose top branches are heavy and strong. There is a cause and a sequence in things, and a beginning and end in human affairs. To know the order of precedence is to have the beginning of wisdom."

—*Confucius.*

CHAPTER XIV

INSIDE THE HOME

“**B**IOGRAPHY exists to satisfy a natural instinct in man” we are told by a Master of the art, “....the commemorative instinct—the universal desire to keep alive the memories of those who by character and exploits have distinguished themselves from the mass of mankind.” And since character and exploits jointly contribute to biographic personality, it remains to present Ganga Ram as he was in private life, apart from the aspects of his character that are to be seen when he is at work.

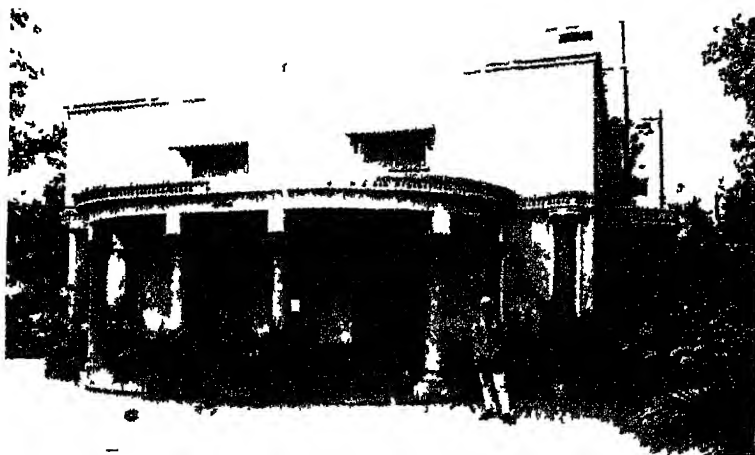
Twice married, he was the father of three sons and three daughters. Fond of his children and dutiful as a husband, he had real happiness in his home, and this provided the peaceful background so necessary for a man of concentrated thought and dynamic action.

In bringing up his children, being himself bred up in the school of self-denial, he never allowed his deep affection for them to mitigate the exacting discipline of their lives. “Here I saw you,” wrote an old friend of Ganga Ram to his second son, Balak. Ram, “a boy of five or six years old tied up to a:

tree. I had an altercation with my friend on this occasion for treating a small child so cruelly, especially after the death of his grandparents. The offence for which this punishment was given was that the little boy indulged in eating raw fruits. Eventually I got you to apologise, and to promise that you would never do so again, and I stood security for you."

Not only could Ganga Ram be really stern when he wanted to, but he had in addition a short temper and a sharp tongue. "One morning in my presence" another old friend wrote, "a gray-bearded Head Clerk laid a big file before him. On turning its leaves, he went into a rage, shivered, clattered his teeth, gave the poor man a strong dose of his tongue, and vociferously threw down the file on the floor. The clerk took up the file, returned to the next room and perfect silence prevailed for a while. I broke it saying 'Rai Sahib, what became of you?' 'Sometimes I become mad and lose my temper' was the reply, and with that he rested his head on the table, placed his forehead between his thumb and fingers, and tears of repentance and remorse streamed from his eyes. We then went out for a walk."

Beneath this quick temper, which burst out at times violently, but always passed with the speed of a dark monsoon cloud, there lay his heart, infinitely tender, loving and sympathetic. "There was no sophistry or formalism about him," says a friend who had known him for more than thirty years.



A BLOCK OF GANGA NIWAS, LAHORE
where Sir Ganga Ram spent the major portion of his life while at Lahore



SIR GANGA RAM'S BED

"He was always open and frank like a true Punjabee, and blunt like a soldier. To him nobody was a stranger. To a stranger he would talk like a child to his intimate playmate.

"I remember once a lawyer, whom he did not know, being introduced to him, and he started the talk like this: '*Are you filling your house with money by robbing the poor?*' But this apparent bluntness was accompanied by an undercurrent of sweet, apologetic, encouraging suggestions and a lovable open-mindedness. The stranger was so well impressed that he left with the idea that Sir Ganga Ram was his real friend. This open-mindedness is a characteristic of the true Punjabee and Sir Ganga Ram was the best illustration of it. Both in his private and public dealings he was open, frank and straightforward. He never hit people behind their backs, and had no selfish axe to grind."

"As often as I met him I found a genial jovial friend always practical and instructive" says another friend, "and there was a crispness in his conversation which was most stimulating."

"To the outsider he had an apparently blunt exterior" says one who knew him intimately, "but there was much that was lovable in his gruff but honest personality."

Broad-chested, round-faced Ganga Ram, robust in physique and full of healthy humour, stood five feet ten inches high. Simple in his way of living, he had no fastidiousness in his choice of clothes,

and no fancies in his choice of food. Given to following a plain man's standards, he was not a strict vegetarian, sometimes liked to eat English food, and had a weakness for sweets. Whenever he went to Gangapur, he never missed the opportunity of taking a glass of freshly-pressed sugar-cane juice, cocktailed with milk.

In his early service days, he was fond of riding, but later he took exercise in games, and most evenings found him on the tennis court having a hard game.

The catalogue of Ganga Ram's achievements was long, and there were many who wondered how he husbanded his energy to get such splendid results. But a glance at Ganga Ram's time-table will show the secret of his immense vitality and capacity for work.

His day began at two o'clock in the morning, with a cup of tea. When other members of his profession were snoring in the early hours of their sleep, after a late dinner and a game of cards, Ganga Ram was at his files.

Having dealt with his plans and projects for the day in the early hours of the morning, he would lie down for a nap between six and seven. Up at seven, he began his round of the public works under construction, and, after three hours of inspection, came back at ten to take his morning meal. From eleven to twelve he would again lie down for another nap. Between twelve and four-thirty in the afternoon he attended the office, and from five to six he played

tennis. By seven o'clock he would have finished his evening meals, and after that he would spend one hour reading the newspapers, which in those days always came out in the evening. When the clock chimed eight Ganga Ram was ready for his night's sleep, after a long day of work and recreation.

His hours of work were no doubt unusual, but so, on the other hand, were his schemes. It was in those early hours of the morning, the quietest and most inspirational of the day, that his amazingly daring and exact schemes were sketched out, mostly when he was lying on the bed that he used for forty-six years. He loved to work lying in his bed, wrapped in his *razai* in time-honoured Punjabee fashion.

If there was one trait of his character which dominated the whole of his life, in spite of its self-imposed discipline, it was the goodness of his heart. His heart was like the most delicately-tuned receiving set, which responded spontaneously to the sorrows and sufferings of the world around him. His understanding was immediate. Lying in his bed sometimes in the early hours of the morning he would recite to himself the moving verses of *Munajat-i-Bevgan* (the prayer of the widows) by Maulana Altaf Husain Hali, the poet of New India, who immortalised himself and the cause of the widows, the dumb victims of a cruel social system. Ganga Ram was too sensitive to suffering to read through Hali's poem unmoved. Every fibre of his being vibrated

with emotion when he read it, and tears came to his eyes.

From his youth he had been particularly sensitive to the sufferings of the widows, and after reading the Maulana's poem many times in his early morning hours his mind was made up. He dedicated his earnings to their service, and their care became the burning enthusiasm of his life. The pace of all his charities was regulated, and their direction determined, by the need of the widows. Everything else which came subsequently was only a new leaf in the flowering branch which he nurtured with his money and love.

Because he had known himself of the sufferings of the very poor, Ganga Ram's heart always gravitated towards those who were in need, and all through his life it beat for the sorrows and wrongs of the common man. His attitude to life was a refreshing contrast to the usual attitude of the *nouveau riche*, and he reflected rather what he had learned so early from the calm communicative gaze of the old *sadhu* than the rank and position in consonance with his swelling bank balance. He was indeed one of those rare men who are not corrupted by wealth suddenly acquired, and he only regarded himself as a trustee of the money which had come to him—an executive head whose duty it was to spread his wealth around him and share it with those who needed it most.

His attitude to marriage alliances is typical. It was becoming more and more the custom for the

rich to seek the rich. Money became the measure of virtue, and marriages were looked upon simply as opportunities to create "dynastic alliances." Iron magnates married themselves to iron magnates and industrialists married industrialists. But Ganga Ram was not to be tempted in such a way. In a letter to Raja Jawala Prasad he writes: "One Raja... of the great firm of Raja.... multi-millionaires of Bombay sent his *munim* to Lahore. The *munim* was very anxious to see Hari Ram's children (his third son) but they were out and I did not encourage him telling him that I was not inclined to give my daughter to such a rich family, and to such a distance as Bombay."

Jawala Prasad, of all his friends, knew the most about him and was consulted in every enterprise he undertook. "There is a scheme of irrigation here" wrote Ganga Ram, "to cost sixty lacs, to make one crore for certain. I want to consult you about the propriety of taking it." It is interesting to remember that this is the same Jawala Prasad whose very appearance as a young man on the scene of the Darbar had thrown him into an ugly temper!

Their acquaintance dated to a still earlier day; "I first saw Sir Ganga Ram in 1896 at Meerut, where he went on behalf of the Vaish Conference. The only impression left on my mind on this occasion was that he had a beard and that his speech was inaudible. This contact was remote and formal." His interest in social reform thus dates from his-

early service days. In those days of the end of the last century anybody who was vocal in his desire for reform was regarded with suspicion, but Ganga Ram was even at that time adamant when it came to his beliefs and principles, and he stood firm on the acknowledged brilliance of his growing service career and the rectitude of his personal character.

In 1917, the Vaish Conference was held in Ambala. "Among those who attended was the late Rai Dwarka Das, M.A. and the 'Punjab Kesri,' Lala Lajpat Rai. Whether widow remarriage should or should not form a plank of the Conference platform was hotly discussed among the leaders, Rai Ganga Ram being one of the most ardent advocates of the Widows' Cause" we are told by an eye-witness. "This and the technical education fund which was started at that very conference created the largest stir in the Conference circle. At least at this distant date, I only remember that these captured the imagination and sympathy of the younger generation. Rai Ganga Ram took a leading and prominent part in them, and it was he who gave a practical push to both."

Despite the best efforts of the reformers, the forces of conservatism triumphed, and the resolution on widow remarriage was finally thrown out of the Subjects Committee. This was a challenge which Ganga Ram was not the man to take lying low. He along with others of his views organised a separate meeting in the Hindu Hall, and after laying down

the main lines for its functioning, the Widows' Marriage Association was formed. Ganga Ram donated Rs. 2,000 towards its fund. The Headquarters were to be situated in Patiala as the office-bearers, Ganga Ram the President, and Jawala Prasad, the Secretary, were living there at the time.

Thus it was at Ambala that Ganga Ram took the first stride in his reform work within the fold of Hindu Society, work which was to earn for him the blessings of the oppressed and the outcast, and the hundreds of young widows whose lot is a slur on the name of India.

As the years went on, his interests widened, and he came to champion the prohibition of Child Marriage, because that practice, he argued, was at the root of the tragic widowhood of babies. Spurred on by his great interest in the subject he wrote to Pandit Madan Mohan Malaviya: "You have been promising to send me your draft for the Child Marriage Bill, which I have not yet received. There are a very few years of your life left, and I advise you strongly to devote them to social emancipation, and to work in the right path in the cause of the Hindus."

When Pandit Malaviya heard of the news of his friend's death in London, his first thought was one of deep regret that the work had not been carried through in his lifetime: "His heart actually melted at the thought of the widows' sufferings," he said, "He was a strong-minded man, but I saw him more than once full of tears when talking of the sufferings

of girls exposed to the responsibilities of a married life and maternity at a tender age, and of widows who are the victims of early marriages. He was urging me for some time past to prohibit marriages of girls below the age of twelve years at least. I have given notice of a Bill to bring about this reform which I hope will be introduced into the Assembly during the next Delhi Session. But it will always be a matter of grief to me that I was not able to do this during the lifetime of my dear and esteemed friend."

Although, however, Ganga Ram was earnest in his efforts for reform in this particular case, he was not for all reforms that were mooted in the social sphere. Apart from the question of Widow Remarriage and other business akin to it, orthodoxy held away at least in some aspects of his mind. His attitude to civil marriage is a perfect instance in point. We have it on the authority of Sir H. S. Gour, M.L.A. that when he introduced his bill for the establishment of Civil Marriage in India, Ganga Ram came to ask him why he was introducing such a radical measure "I explained to him" said Sir Hari Singh, "my purpose—with which he did not seem to be in sympathy. I also explained him that his own widow marriage movement could not possibly succeed without the help of my bill which permitted inter-caste marriages. My Bill became law, and is now Act XXX of 1923, permitting as it does inter-marriages between Hindus, without reference to caste, and between

Hindus, Buddhists, Sikhs and Jains. The widows therefore have cause to be grateful to the Legislature for enabling them to make a wider selection of husbands."

These seeming inconsistencies show Ganga Ram as a very understandable human being, for human beings tend to be illogical, since none are perfect.... and "candour", in the words of Sydney Lee, "is a cardinal principle of right biographic method. The biographer is a narrator and candour is the salt of his narrative. He accepts alike what clearly tells in a man's favour, and what clearly tells against him. Neither omission nor partisan vindication will satisfy the primary needs of the art."

If Ganga Ram was in many respects orthodox, he was by no means a bigot. His attitude towards his own religion was the attitude of a man who has within him the love of Truth, and he was devoted to his religion and the deep ideals within it. It is to his credit that he never confused the tyrannical customs of his own faith with the kernel of Universal Truth that it contained, and he was not willing to accept child marriage and widow persecution as a part of that religion. Being himself blessed with a happy home life and children, he could never understand why any young girl, the plaything of Fate, should be denied these simple beautiful rights. Every widow remarriage that was performed under the auspices of his Association was to him a personal joy, as though he had vindicated within himself the

abiding beauty of human relationship and had left the world richer by cancelling at least one poor woman's lonely lot.

Such a creed is the creed of an honest man, who has no place for intolerance. It is, therefore, not surprising that, devoutly religious as he was, he always treated people of other communities with the greatest respect, and could not be regarded as a communalist, in the sense of being an aggressive partisan of his own religion, irrespective of the feelings of others. A typical instance of this care for his brothers' feelings is contained in the following anecdote related about his magazine *The Widows' Cause*. "In one issue of the journal had been published an article on 'Muslim Swarajya and Hindu widows, a reply to an attack on Hindu widows. The next morning the journal was to be despatched. By chance, the Honorary Secretary took one copy of the issue to Sir Ganga Ram who read the article, and immediately ordered him not to despatch the journal with that article in it. Next morning the page containing that article was torn off and burnt, before the journal was distributed. Sir Ganga Ram then ordered that controversial articles which might endanger Hindu-Muslim relations must on no account be allowed to appear in his papers."

Another incident is related by the same writer : "At Nagpur, he presided over a meeting of the Vidhwa Sabha. Just before the proceedings were

going to commence, he called the speaker to him, and enquired in a whisper if there was any Moham-medan in the gathering. The speaker said that there were four or five. Sir Ganga Ram at once warned the speaker not to mention the word 'Moham-medan' and not to speak a single word that might injure the feelings of those who were there."

That he felt very strongly on the matter of communal relations is further shown by the letter which he sent to Pandit Moti Lal Nehru. In 1926, Calcutta was experiencing a blood-bath of communal riots, and the Congress happened to be in session at the same time. Ganga Ram could not restrain himself: "While hundreds of deaths are occurring in Calcutta," he wrote, "leaving families in misery, you are deliberating over silly resolutions in the Congress....If there is any grain of humanity left in you, you should proceed to Calcutta and bring about peace. I never had a wish to write to you before, because I know you are engaged in a wild goose chase after Swaraj."

Pandit Moti Lal, not to be outwitted, replied: "I have only to ask why it is that you with all the tons of humanity you possess cannot make up your mind to come out of your shell and cease making your piles for a while to stop Hindus and Muslims killing each other."

Ganga Ram, closing the correspondence, wrote back: "No doubt I make piles of money, but it is really mother's milk, and not like you and your

professional lawyers who make their piles from the blood of humanity.... O, my dear Moti Lal, come to your senses and come to me, and I will teach you how to win over the masses. What is at the bottom of the trouble is the want of food which only the development of agriculture can supply."

And, leaving the clashes of political opinion and controversies about the economic betterment of the country on one side nobody will deny that, if Ganga Ram earned, he earned honourably by bettering the soil and increasing wealth of his countrymen, not only his own. If he knew how to earn, he also knew how to spend, and the capitalist hoarding his millions or juggling with them to satisfy his power complexes in the economic field is far away from the simple man who took what God and hard work gave him as a trust for others, spending it where most it was needed by his less fortunate fellow-citizens.

“To force widowhood on little girls is a brutal
crime”

—*Gandhi*

CHAPTER XV

DAUGHTERS OF SORROW

“WHO will not weep over the figures which show the misery caused by child marriages and enforced widowhood among the Hindus?” questioned Sir Ganga Ram on the cover page of a pamphlet which he published in 1926. This pamphlet had a significant title. It read “Purify your homes before you desire *Home Rule*”, and typically illustrated Ganga Ram’s way of thought : he always put social reform before political reform, and thought that the cause of political emancipation could never succeed unless this was first accomplished.

The pamphlet is unusual, in that it contains no writing, but only figures. . . . They are taken bodily from the 1921 Census Report, and are too shocking to need comment. Taking all religions together, (it is interesting to note that it is not only in the Hindu community that child marriage exists, but in all communities, the only mitigating factor in the non-Hindu communities being that public opinion does not prevent remarriage), there were in 1921 in India 759 widows under one year of age. Going year by year, we find that the number of widows

between four and five years of age amounts to 15,139. There were more than 15,000 widows below five years of age, out of whom nearly 12,000 were Hindus.

Between the ages of five and ten, there were 102,293 child widows, and 279,124 between the ages of ten and fifteen. The terrible gravity of the crime of child marriage can only be realised when we visualise the fate that awaits these child widows in terms of human misery.

"Who will not be moved by the deplorable lot of our widows?" asks Dr. Mrs. Muthalakshmi Reddi, ex-Deputy President of the Madras Legislative Assembly. "If a child of five or eight, ten or twelve years who has not even seen her future husband properly, or even spoken to him, and has not even understood the sacred significance of marriage and married life, happens to lose her husband, is it her fault? (It should be mentioned here that the formal, though binding, marriage ceremony may take place at a very young age, but the girl continues to live with her own parents in most cases, and does not become a wife until many years later). On that account is she to be punished with disfigurement and boycott from everything that is nice and enjoyable in the world?

"Is our society, boasting of such ancient culture and civilization, justified in according to her treatment contrary to all justice, and to all human feelings of right and wrong?

"The very day the unlucky child loses her husband, a husband not of her choice but of her parents, she becomes an outcast, even in the same house where she was born, was so much fondled and brought up. She becomes a creature of ill-omen, her very presence forebodes evil to others and will bring ill-luck. She is treated with scorn and contempt. Thus she is denied all enjoyment, and while her nearest and dearest, her grand-mother, mother, mother-in-law, if they are blessed with husbands will go about gaily dressed in velvet and silk, decked with diamonds and rubies and flowers, this poor creature, child though she may be, must wear the plainest *saree*, must not wear any jewellery, nor take part in any rejoicings. When there are festivities, she must hide her face even from the sight of her own people, and hide in an unknown corner of the house."

"Thus," she continues, "she is forced to lead an ascetic life even in the midst of wordly surroundings. Can any of us conceive a worse punishment, even for the most hardened criminal? In no other country do we find such severe social laws enacted against the weaker sex. How can we hope to become free and great when we keep twenty-two and a half millions of young women in such perpetual misery and torture, when we keep them in social bondage, which hold them so tightly that even the honest and sincere efforts of great saints like Pandit Iswara Chandra Vidyasagar, Pandya, Verasalingam Pantulu, and Sir Ganga Ram have not yet torn it asunder?"

"The Bengal apostle of the same noble cause (that of widow remarriage), Pandit Iswara Chandra Vidyasagar, did not see the fulfilment of his hopes," wrote Mr. Justice Coldstream, "but there is a spark of sympathy in India, which, fanned by pity and a sense of justice, may soon burst into flame. Voluntary widowhood consciously adopted by a woman who has felt the affection of a partner, adds grace and dignity to life, sanctifies the home, and uplifts religion itself. Widowhood imposed by religion and custom is an unbearable yoke, and defiles the home with secret vice and degraded religion."

The words of Dr. Gour who originally sponsored the Civil Marriage Act brings home the wretched lot of those daughters of sorrow. "It is a regrettable fact," he says, "that the widows in India number no less than eight to ten per cent. of the adult female population of the country and that the majority of them are widows between the ages of fifteen and twenty-six. Under the Shastric law they are not permitted to remarry. The immorality and suppression of births, the strangulation of infants so born, is a common occurrence to which the record of crime amply testifies, and these are only a very small percentage of cases compared to those that never see the light of day. Even in the case of widows who are otherwise good, their life is one of undiluted unhappiness. They are despised by all concerned as women who have lost their husbands on account of past sins. They are compelled to live on a starvation

diet, disfigure their bodies, and pass their life in fasting and prayer, penance and self-mortification. The human misery to which the women are subject would tear the heart of the most perverted misanthrope, but the force of habit and the laws of religion make the people callous to their sufferings, and that regard their life as a natural one calling for no sympathy or help."

Sir Ganga Ram did not shirk suffering. In his own heart he shared the torment which millions of widows were undergoing in the agony of their cancelled lives. "Once I had a talk with him about the condition of the widows of Bengal" we learn from a friend, "and I told him how Hindu society there was maltreating them. There were tears in his eyes, and he gave me to understand that if necessary he would give all he had to wash this blot from the name of Hindu society."

Another instance of the deep emotion that always descended upon him like a torrent when he heard of their sufferings is revealed in a letter from Lala Shiv Dyal: "At the Amritsar Congress, a Widow Remarriage Conference was held under the Chairmanship of Mahatma Hans Raj. Sir Ganga Ram's throat was choked with tears, and the duty of reading his address devolved upon me."

Sir Ganga Ram was too much of the practical man only to weep and not to act. We can hear the story of his conversion to their cause in his own words:

"The first thing that attracted my attention was the sad plight of Hindu widows: and, when I studied the Census Report of 1911, I was very much moved by the startling figures in it. They showed that in the whole of India there were twenty-six million widows, of whom no less than 21 millions were Hindus, and most of the latter child widows. In no other country of the world is there even such a phrase as child widows, yet in India, taking the Hindu girls, one in 72 are married under five years, one in ten under ten years, 2 in 5 below fifteen, and one in ten below twenty.

"There are two and a half million wives under ten, and six millions under fifteen. The existence of child widows can be traced to two causes—first, the custom of child marriage which creates a large percentage of child widows. Much of this evil could be remedied if there were no contributory cause, namely popular prejudice against remarrying widows, but unfortunately such a prejudice does exist causing widespread misery. If some legislation forbidding child marriage under the age of fifteen could be enacted, three lacs of widows in Hindu society would be saved their miserable lot.* Moved by these appalling figures, I made up my mind to do what I could within my humble means to eradicate this evil, and started a Widow Remarriage

*The Sarda Act prohibiting child marriage was passed in 1931 and has met with some success although the very low fine demanded does not deter richer families. Educated public opinion is, however, strongly against the practice and time will see it wholly eradicated.

Association in the Punjab, in December 1914."

This was the real fountain-head of all Sir Ganga Ram's charities. To it he never grudged any money that was asked and he regarded it as his sacred duty in life to wash away the tears of the distressed, and give them a happier life.

"Our first act," he says, "was to collect all available literature on the subject. We found that we had the sympathy of the Government, because, as early as 1856, a Widow Remarriage Act was passed. We had the support, too, of the Shastric authority of the late Pandit Iswara Chandra Vidya-sagar, C.I.E. who, though coming from Bengal, the centre of Hindu orthodoxy, fearlessly advocated the remarriage of Hindu widows."

The first committee consisted of Sir Ganga Ram as Chairman, Babu Abinash Chandar Majumdar as Secretary, Rai Bahadur Bishan Das, Rai Bahadur Kanwar Sen, Lala Shiv Dyal, M.A., Retired Inspector of Schools, and Lala Lajpat Rai Sahni as Assistant Secretary. It was in this way that the scheme of a charity trust took birth. For the carrying on of the work, he handed over to the Association a building in Gawal Mandi, Lahore, bringing an average rent of Rs. 92 per month. The Committee was regular in its meetings, and each member of the Committee took the deepest interest in his work. Their ambition at that stage was to register a marriage a day: this became their slogan.

There was an understanding that if the building

given did not prove enough for the growing work, more money and property would be forthcoming. Although the work began originally in the Punjab, and was called the Punjab Vidhva Vivah Sahaik Sabha, as the scope of the society widened, the word 'Punjab' was dropped, and it became an all-India association.

"I well remember how tears of joy flowed from his eyes when he witnessed one of the earliest widow remarriages in a high caste *khatri* family" adds a friend, in his recollections of Ganga Ram, "and while giving me an account of a meeting of newly-married widows whom he had recently called at his house in Lahore, his face seemed to bloom with pleasure following a sense of duty well-discharged. He succeeded in infecting those who heard him with his own enthusiasm for the cause of the oppressed class."

Well realising that publicity and propaganda was the most necessary thing for his movement, he took it upon himself to provide the funds for the production of literature in many different languages. Soon the expanding needs of his work, which had begun with only one clerk and a peon, led to the setting up of a full-fledged office. In 1923, Sir Ganga Ram got his Charity Trust registered and the work consequently went forward with greater impetus.

It is interesting to follow the rising curve of marriages which were celebrated by the association. Although in 1914 the number of marriages

solemnised was only twelve, and in 1916 thirteen, by 1920 it was 220, and by 1922, as many as 453 marriages were solemnised in the year. Thus it was in the year of his knighthood, 1922, that his cherished ambition was realised, and more than one marriage a day was arranged. After that, the numbers increased so rapidly that by 1932 the number of marriages per year was 5,493. Thus in a total number of eighteen years, 39,460 marriages took place. It was an impressive total.

The Sabha that had begun its work with Rs. 92 per month from one building, was getting Rs. 1,000 a month in 1922 from several buildings. The amazing growth of this simple organisation is itself a proof of how badly it was needed, and it went forward by the sheer force of its own impetus. In this connection it is interesting to note the very sensible rules that governed its working: in the first place, no fee or donation was expected, and the Sabha did not interfere in the religion of either of the parties. They were to satisfy themselves before a marriage and it rested with them to perform the ceremony but any rites they liked. In the second place, every attempt was made to keep all the correspondence, especially from the girl's side, strictly confidential.

The area of activity rapidly expanded, and the work was carried on at different district, provincial, and presidency headquarters and other branches. There were in all about 425 stations, with their local

committees, for the furtherance of widow remarriage all over India. Journals in English—*The Widows' Cause*; in Urdu—*The Vidhva Sahaik*, and in Hindi—*The Vidhva Bandhu* were published thrice a month from the headquarters in Lahore, and were full of encouragement and information. A good many copies were distributed free, and their propaganda value has been, and continues to be, considerable.

"Thus" says a zealous follower of Sir Ganga Ram in this great cause, "the society which he founded to encourage the remarriage of Hindu and Sikh widows has a vast organisation. Its work was personally supervised by him. During the past few years, the society has achieved remarkable success. It has popularised the idea of widow remarriage to a degree that even the most conservative Hindu does not dare to offer active opposition to the reform. It is satisfactory to learn that the work has been vigorously extended and with good results beyond the confines of the Punjab, and even in places like Muttra and Hardwar, the capitals of orthodoxy. *This reform has not only brought inter-provincial unity, but inter-caste marriage which is a healthy sign for the future.*

Sir Ganga Ram himself was convinced that his prosperity was solely due to the prayers of the widows, into whose dark lives he had succeeded in introducing domestic happiness and peace. One of his friends mentions this in his personal notes: "In 1915 when I was once sitting with him, I found him

very sad. He told me that God had given him everything but not a grandson from any of his three sons. I replied that he was to do his duty, and, if he was doing good work, he was not bribing God. He was to do his best, and leave the rest to His will. It was in the fitness of things that God the All-Merciful granted him five grandsons.....whenever he received titles or was blessed with any worldly success or high profits, he would say that all was due to the prayers and blessings of the widows. When he was knighted in 1922 he was in England. He wrote to me that he had had another windfall due to the prayers of the widows, and he asked me to push on the work, and said that he would be glad to allot over Rs. 2,000 per month to the betterment of the cause."

Another incident in his life which strengthened his belief in the widows' blessings occurred in England in July 1922. The car in which he was travelling was involved in an accident in one of the suburbs of London and was smashed to pieces, but, as though by a miraculous power, Sir Ganga Ram was saved unhurt. About this he wrote to the Secretary of the Vidhva Sabha, Lahore: "God has saved me from the clutches of death. It appears he requires more work of me. Very well, if so, push on vigorously with your work."

At Renala there was another event worth mentioning. Almost eight *lacs* of rupees had been spent in fitting up the plant, but, when the time for

working it came, it refused to function. Frantic telegrams were sent to the Chief who was then in England, informing him of the great difficulty. Failure could easily have meant the ruin of his great hopes in the scheme. He hastened back. It so happened that the moment of his arrival coincided in point of time with an idea which flashed across his son, Rai Sewak Ram's mind. It was tried, and out came the water gushing in all directions in its mission of changing thousands of acres of sandy soil into fertile fields. The people round him gave credit to the stars under which Sir Ganga Ram was born, but all he would say was: "It is the widows' prayers which are working miracles."

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And who shall say that is only an illusion? It may well be that the thousands of happy homes that owed their existence to his courage and vision, the thousands of children born of such marriages, and the thousands of parents who have rejoiced to see their daughters' blighted lives flower again under his influence, have by their love and prayers sanctified the life of Ganga Ram. For those who sow happiness round them in their journey through life are themselves blessed. It is no little thing to set rolling the great stone that had crushed and deformed so many sweet young lives, and many must have been the young mothers who covered their first-born's face with kisses and wept as they prayed for the soul of their great benefactor.

" If the people can be educated to help themselves we strike at the root of many of the evils of the world. This is the fundamental thing, and it is worth saying even if it has been said so often that its truth is lost sight of in its constant repetition "

—John D Rockefeller

CHAPTER XVI

TOWARDS A NEW LIFE

AS the work of re-marrying the widows progressed, another problem presented itself. There were many widows either too old to marry, or too old to be attractive to prospective husbands; others, though young, had children and did not want to marry again; others, again for religious reasons, did not want to marry. They were so many in number that it became a very serious difficulty to the workers in the field, because they had constantly been brought up against such sad cases, and had no remedy to offer.

To Ganga Ram, the solution of this problem was obvious—it lay in making the women independent of charity and the condescension of the family circle. With the idea of training widows to be self-supporting, he made the Government an offer of a building costing nearly Rs. 2,50,000 if they would finance a scheme of Hindu Widows' Home. This home was to have a staff to look after and teach the inmates not only elementary subjects, but to take them up to J.V. and S.V. standards, and make them qualified teachers. The other idea was that they should be

trained in home industries in order to set themselves up as teachers of handicrafts.

The scheme was taken up by the Government and the Widows' Home was opened in 1921 by Sir Edward Maclagan. When Sir Ganga Ram presented the building to the Government formally, he said with his lovable humility in the face of his considerable generosity and achievements: "Everyone on retirement is naturally anxious to be of some service to his country, and, as I did not possess a brain of high order, having been a mere coolie-driver all my life, I, decided to leave the work of political advancement to wiser heads, and to turn my attention to social reform which, in my humble opinion, is the crying need of India."

He went on to tell in his direct and graphic style of the misery of the widows and how in 1914 he had started the Widow Remarriage Association, which by then had grown into a huge organisation. "Through the working of this association," he continued, "we gained one experience—that widows above twenty were in no great demand for remarriage. The question was how to give relief to those who could not, or would not, get married again, and it perplexed me for a long time, until I hit upon a solution, in a way I shall presently describe. On the assumption of the Governorship by Your Excellency, I learnt that Your Excellency's heart was set on the advancement of female education. Encouraged by this fact, and realising that the supply of teachers

for Normal Schools for Women fell far short of the demand, I approached Your Excellency with the suggestion that the Hindu widows might be trained in large numbers to take up teaching as their vocation in life. Your Excellency's noble soul gave a ready response to my humble suggestion, and, through the kind offices of the Hon'ble Mr. Richey, late Director of Public Instruction, Punjab, I was encouraged to propose the placing of a suitable building at the disposal of Your Excellency's Government, with the generous assurance that the Government would be prepared to maintain the institution.

The decision of the Government was conveyed in the following Press Communiqué which I take the liberty of reading *in extenso*, as it concisely explains the whole scheme: "A notable benefaction has recently been made by Rai Bahadur Lala Ganga Ram, C.I.E., M.V.O., who has offered on Trust to the Government a piece of household property on the Lower Mall, Lahore. The Punjab Government has accepted the offer, and desires not only to thank the donor for his generosity, but to place on record its appreciation of the benefit which this gift will confer on the womanhood of the Punjab.

"The conditions on which this munificent offer has been made and accepted are that the building and the site be devoted to the establishment of a Normal and Industrial School and Hostel for Hindu Widows, to which shall be attached a first-class

Secondary School for Girls. The whole institution will be under Government control, there being a small committee for the control of the Widows' Home and for the general supervision of the Girls' High School.

"Admissions to the Normal and Industrial School will be reserved exclusively for Hindu and Sikh widows. The Hostel will accommodate at the outset 80 boarders. Subject to this numerical limit and to the approval of the Advisory Committee all classes of Hindu and Sikh widows will be eligible for admission. Thirty stipends of Rs. 15 per month, each tenable for three years, will be given for students in the Senior and Junior Vernacular departments, and twenty-five stipends of Rs. 10 per mensem each, tenable for three years, will be given in the class preparing students for admission to the training class. On the Industrial side, it is hoped to offer to widows, who are unsuited for educational work, such a training in cottage industries as will enable them to maintain themselves.

The Secondary School will be open to girls of all communities: it will also be attended by such Hindu widows of the Normal School who are not yet sufficiently advanced in general education to receive immediate training as teachers....i.e. up to the Primary standard for the Junior Vernacular teachers, or up to the Middle for Senior Vernacular teachers; also up to the Primary standard for pupils in the industrial section.

"In order to make the fullest possible use of this proposed school, and to expand the facilities for the education of girls, it has been decided to amalgamate the present Victoria Girls' High School with the new institution, of which the Victoria Girls' School will then become the Anglo-Vernacular middle branch.

"The Government Girls' School, with which Lady Maclagan has very graciously condescended to her name associated, will be called the Lady Maclagan Girls' School.

"This school is non-denominational," he continued," and is open to girls of all communities. At the back, this new double-storied structure stands before you.....it will be a home for Hindu widows, and will train them as teachers for the Government Normal Schools, and also in cottage industries. It will accommodate at least eighty widows, besides the Superintendent and the matron. It has eight class-rooms, and wide verandahs for apparatus to be set up for the industrial section.

"Having said these words, it remains for me to formally present this property to the Government on trust to carry out the objects above indicated. I now respectfully ask Your Excellency to graciously open this institution. Let us invoke the blessings of God under whose merciful guidance we hope the institution will be so managed as to prove a source of relief and comfort to the widows of Hindu society and at the same time help to extend women's educa-

tion in the Punjab, and thus be a source of enlightenment to the women of the Province."

Sir Edward Maclagan rose to thank Sir Ganga Ram in a speech which showed his appreciation of the spirit in which it was offered. "As you have heard," he said, "this institution is what our Canal Engineers would call a 'Triple Project'. There is the Normal Industrial School, there is the Hostel, and there is the Secondary School for girls. The first two are for Hindu and Sikh widows, and the third for girls of all communities. They represent two causes which the generous donor has much at heart—the betterment of the lot of widows and the advancement of higher education among girls. No one can say that there is no room for enterprise of this kind, for we have six and a half lacs of Hindu and Sikh widows in the Province, and we have over a crore of females of whom only a little over half a lac can read and write. The institution we are opening to-day is the first of its kind, the first in which the two objects have been blended, and made to work in with each other. It marks a stage in the movement towards social reform, in which the Rai Bahadur has shown himself to be so enthusiastic and practical a pioneer.

The buildings and the site have been provided by him, and on both he is to be congratulated. The buildings are his own construction, so that one would not dare to criticize them even if one had a wish to do so. And the site, this secluded little

nook in the middle of what we know as the educational quarter of Lahore, is all we could wish for. If it is to expand, there are properties round it and I know that Rai Ganga Ram has cast audacious eyes over the walls at our official shrine of Agriculture, and even possibly at our Printing Press. It is possible too, that, before many years have passed, our Government Secretariat may have moved elsewhere, and we may find fulfilled the dreams of those who look to see the whole neighbourhood of Anarkali's tomb devoted to institutions for the education of girls. If this dream should eventuate the spot on which we stand will have been well and prudently selected."

"Rai Ganga Ram," he continued, "has been known to me and to members of my family for a long period of years. In all that time, I have never got to the end of the number of parts which he is competent to play on the stage of life. We know him for many years as an engineer, engineering a system of water supply, sometimes running a *darbar* and sometimes undertaking vast hydraulic experiments. At other times we meet him as the owner of cotton factories, or again more recently as a pioneer of cold storage. We know him too as a big land owner, so big that questions are asked about him in the Legislative Council, and as the inaugurator of model farms and model villages. Others of us have enjoyed his company as a delightful and thoughtful writer on economic subjects and not least as a writer

on the condition of widows in this country. We find him to-day in the capacity of which he has most reason to be proud, in that of a benefactor of mankind. It is only a few days ago since he inaugurated a dispensary in the city of Lahore, and to-day he is starting this further venture for the good of our people. It is not in itself a small thing, compared to the future movement it represents. Let us hope that from this institution will develop results which, as the years roll on, will bring rich blessings to the women of this Province."

Ganga Ram took a very deep interest in the progress of the institution. Over eighty scholarships—thirty of Rs. 15 per month, twenty-five of Rs. 10 per month, and twenty-five of Rs. 5 each—were offered for pupils. He was always anxious to know how many of the pupils had been settled in life independently as a result of the training they had received, and he followed the career of every one of his students with that affectionate personal interest he always showed to widows. To his great joy, he found that nearly all the qualified students had been employed as teachers at salaries ranging from Rs. 35 to Rs. 80 per month. He always looked upon this effort of his as a torch, showing the way to better conditions for widows. He longed for other such homes to be started all over India.

Mrs. Margaret Cousins, one of the founders of the All-India Womens' Conference, and a veteran

of the suffragette movement wrote about this time : "I visited the Widows' Home and Industrial School founded by Sir Ganga Ram in Lahore, and I was very much impressed with them. The work carried on there was splendid, and was going on under ideal conditions. I wish in Madras there would be a Ganga Ram who could endow such large sums for philanthropic work. Madras badly needs a foundling home. Would there ever come a Ganga Ram, or a Bhandarkar, in Madras for endowing a fund to start such a home?"

But one problem solved only brought another in its train..... the problem of the widows who were illiterate and could not join a residential institution. The whole difficulty of the situation was imprinted on his mind because of a very sad case that came to his notice. A young man drawing a meagre salary died leaving a young widow, and a widowed mother. He was the only breadwinner of the family. A member of his staff suggested that he should help them. Ganga Ram asked "What sort of help?" "Give them forty or fifty rupees" was the reply. "And how long will that last?" was his retort. The man did not reply, and before them both was the black future of two lonely and unprotected women. "Can they use a Sewing Machine?" Ganga Ram said. The man promised to find out. The next day he was told that both could use a machine. He immediately ordered a new machine to be sent to them. He continued to take an interest in the

two widows, and was extremely happy to learn after about two months that they were making from Rs. 50 to Rs. 60 a month. This led him to found the Lady Maynard Industrial School for Hindu and Sikh Women and Girls, which is situated in the Joure Mori, Lahore City, in February 1924. He approached the Ministry of Agriculture with an offer of a building costing Rs. 1,00,000, and a controlling committee was appointed. The building was endowed by him, although the running expenses were met by the Director of Industries, Punjab. All arts and industries such as tailoring, embroidery, hosiery, *tilla* and *gota* work, harmonium playing were taught there. The courses of study were of one and two years and regular certificates were given to the students by the Director of Industries, Punjab. The institution is free and a good many of the materials are supplied to the students without cost. Many students trained in this school are earning their living successfully, and some have even taken employment.

There were two major problems when the institutions began....how to finance girls who were making goods, and to market their products. For the first he advanced Rs. 2,000 to provide a permanent fund, stipulating that the profits from the sale of the girls' work should also go into this fund and for the latter he started an Industrial Shop under the control of his own Trust. This shop was to buy up all finished goods, and one anna per rupee

was to be paid as profit in all cases.

The array of Ganga Ram's benefactions is more than impressive, including as it does all possible methods of helping the widows, leaving no loophole for any unfortunate one to feel that she has not been considered. These schools continue to turn out year by year women with a new courage to face life, women to whom the future is brighter and more interesting. For thousands who would have fretted their lives away in drudgery and tears a new way has opened a way by which they will be able to keep themselves, and save up for their old age. To have lightened the burden of so many unfortunates is no mean thing. Not all have been able to express their appreciation of his work with the feeling of Khwaja Hasan Nizami, the renowned Muslim Litterateur: "Were it possible to part with one's share of life for another, then I would have been the first of men to have dedicated years of my life to be added to Sir Ganga Ram's life, so that he might have lived longer and rendered even greater services to the distressed women of India."

It is not given to us to help in that way, for even though a man be like Vikramaditya, and fulfil an old *sadhu's* blessings, he must one day end his life. But, though one man's span of life be ended, his work may go on and gather strength from year to year.

"There is no way of disposing of surplus wealth, save by using it day by day for the general good. The day is not far distant when the man who dies leaving millions behind him which he was free to administer during his lifetime will pass out unhonoured, no matter to what use he leaves the dross that he could not take with him".

—*Andrew Carnegie.*

CHAPTER XVII

TO THOSE IN NEED

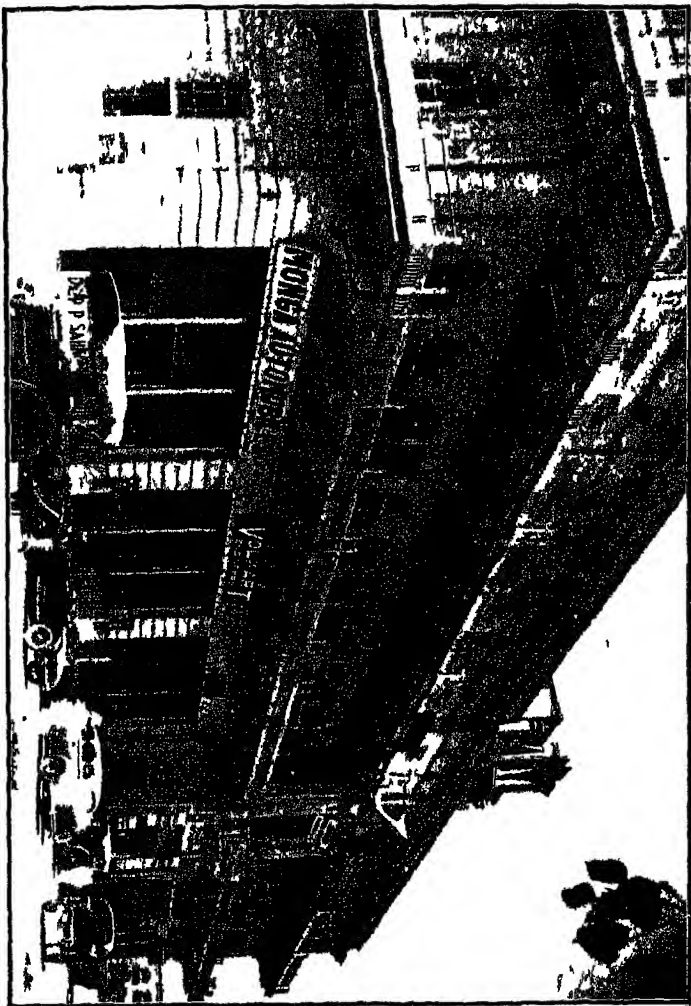
IT is said that those who become rich forget the sorrows of the poor, but if Ganga Ram stood on the hill-top of prosperity, his eyesight was always long enough, and his heart big enough, to see the agony of the poor and to feel for them. His protective shell was so thin that he could not help suffering acutely with those who surrounded him in his daily work—the peasant, the oppressed, the unemployed. Every time he saw a youth struggling to build up his life against adverse circumstances he remembered his own struggling, difficult youth, and his heart would go out to him. It was as if he himself was being buffeted again by a cruel society, and pitting his pigmy forces against forces which he could neither understand nor control. It was as if he felt within his very bones the tragedy of the boy who wants to work and cannot—the tragedy of unwanted labour and unwanted skill.

But, shrewd businessman as he was, Ganga Ram realised that the benefactions born of his impulses were getting too much for one man to deal with alone, and in 1923 he created the Trust that

stands in his name, known as the Sir Ganga Ram Trust, to organise and control the money he had donated to charities. In his lifetime, many fine buildings and other property was left to the Trust, and the income came to about Rs. 1,25,000 from a capital of thirty lacs. Since his death the Chairman and the Honorary Secretary are being elected annually by the Trustees.

A story is told that while reviewing one of his employee's work in the Annual Report of an institution, the Honorary Secretary happened to write "He would be of greater good to those for whom this institution was started." Sir Ganga Ram was perturbed at the word 'good', and wrote instead 'service' saying "We are doing service to our country, not good". It was in the spirit of service that all his charities were made, and none more conspicuously than the Sir Ganga Ram Free Hospital which was started in 1923.

In 1921 Sir Ganga Ram purchased land in the heart of Lahore City, Wachhowali, and constructed with Rs. 1,31,500 a building for the Sir Ganga Ram Charity Dispensary. The Dispensary was intended to administer medical relief to the needy, irrespective of caste, colour or creed. It soon developed into a hospital, the biggest of the charitable institutions of the Province, with well-equipped surgical, medical, X-Ray, dental, and women's departments and a modern clinical laboratory. It now ranks second only to the Mayo Hospital, Lahore, and was taken



SIR GANGA RAM TRUST BUILDINGS IN LAHORE

over by the Trust Society in 1923, when land was added to it, and further buildings were constructed. Now there is a Women's Hospital attached to it, housed in a new building, very well equipped. The Hospital is in the charge of Dr. B. J. Sahni, assisted by some Assistant Surgeons, a Lady Doctor, and other members of the staff. Over a lac of patients benefit yearly from the treatment given there, and, situated as it is, in the real city area, it has become a true "poor man's hospital".

The influence of Ganga Ram has always been felt wherever he has gone and it is significant to note that when in 1889 a heated discussion was going on as to whether the D.A.-V. School should or should not be raised to the status of a College, Sir Ganga Ram came in and, finding the votes equally divided, gave his fateful vote in favour of opening the college. Thus began the D.A.-V. college which has had an influence on the educational life of the Province which even Ganga Ram could not foresee. He helped the College, which was his first educational "child" with a good deal of money, and he was equally generous with the Kanya Mahavidyala at Jullundur, a school with a personality of its own, and grounded on truly Indian ideals.

As the years went on however he began to realise more strongly than ever that education was not enough—it was also highly necessary to provide work, or show avenues of possible development to the students who qualified themselves. The lot of the

educated unemployed always attracted his sympathy. "Enclosed a letter from that unfortunate...." he wrote to his friend Jawala Parshad. "Just see what things are coming to. This man, having taken an M.A. in mathematics is now struggling for a crumb of bread. If you can do anything for him, just do it for humanity's sake."

His interest in the unemployed was not merely passive, and he was always on the lookout for new avenues of employment for them. "I hear" he wrote to Raja Jawala Parshad, "that the guarantee of employment for the Civil Engineers who pass from Roorkee is abolished. Is that so, and what are the rules now? Please send a copy of the rules to my Lahore address.

"I am feeling nervous about it," he continued, "as it will injure the Hindus very much.... How is it you never informed me?"

The more thought he gave to this problem, the more he was impressed by its gravity, and he felt more and more convinced that the path of the future was far away from the service track. He often used to say that if young men who came out of colleges really showed a capacity to turn to practical use the scientific knowledge which they acquired and if they had the requisite energy, there was an unlimited field of work, useful both for the individual who did it and for the country. He did not believe in inherited wealth, said one of his journals, because he thought that men of intelligence, ability and

energy should create capital. This was one of the reasons why he gave the greater part of his acquisitions to charity and did not think of leaving more than a reasonable proportion of his heritage to his sons.

Sir Abdul Qadir, once Minister of Education in the Punjab, relates the following story in his reminiscences: "Once a friend of mine whose son had got his degree wanted me to introduce the young man to Sir Ganga Ram in the hope that, with his resources and influence, Sir Ganga Ram might help him in finding him some good employment. I did as I was desired, and took the young hopeful to Sir Ganga Ram. His advice was characteristic. He said he would ask the young man to start life in some humble sphere of trade, commerce or agriculture, regarding his degree merely as a grounding for the work before him. He illustrated his meaning by telling us that he suggested to a young man some time ago to start a bakery in any big town where he might cater for such Hindus who wanted bread, biscuits and pastry, but who could not owing to religious or sentimental scruples, go to a European or Mohammedan Bakery, such as already exist. He told us that the young man took his advice, and had a flourishing business. He also told us that he had collected booklets from England and America suggesting means of starting in life, to people with limited resources and capital, and that young man about to enter life could study them with advantage at the Reading Room he had

established. He added that he had ordered the man in charge of the reading room to cut from various newspapers all notices advertising any vacant jobs, and to paste them on a board for the information of those in search of employment. By this simple device, I understand hundreds have been helped to find employment."

So he began to take an interest in individual cases, and from the individual, as he always did, he went to the general, and organised his ideas into a Society. This led to the foundation of the Hindu Students' Career Society in 1924. In his anxiety to provide necessary facilities for the study of promising Hindus who were handicapped for lack of funds, he donated scholarships for the vocational institutions only, tenable in twenty-five technical schools and colleges all over India. He never gave scholarships for institutions outside India, and he never encouraged men to take to professions, which might have the brand of respectability but which could not give them, bread within a reasonable time. He expected all to repay the grant made to them, and his main idea was to help the largest number of students with the smallest amount of capital.

Still more typical of the spirit of its founder was the Sir Ganga Ram Business Bureau and Library. The Institution was devoted solely to the work of placing every facility in the way of educated young men to select their own careers and was the only one of its kind in India. He was always think-

ing of the problem of turning the machine-made products of modern Indian education into earning, useful, independent members of society. Started in 1924, the Institute encouraged and created love for manual work of all kinds and gave young men the latest news of openings in industrial, professional and commercial lines and careers.

The books and pamphlets in the library contained variety of information. There were sections for books for vocational guidance, copies of rules and regulations about admission to various service and competitive examinations, copies of prospectuses of all Indian and foreign educational institutions, and books on technical and commercial subjects, giving the latest modern improvements. Biographies and autobiographies of notable persons were also included, especially those who had risen from poverty to prosperity, as the Founder thought such books would be full of inspiration for young men starting in life. Business reference books and trade journals were there in their hundreds.

The Business Bureau is the practical aspect of the library, and does quite remarkable service in its own way. A Board sits once a week to interview young men seeking work and suggests to them, after a sympathetic personal discussion of their problems, an occupation suitable for them. All these discussions are kept strictly confidential. Information is supplied free of charge of small industries which can be set up with small capital. Other trade

enquiries are also attended to.

Not the least important of its functions is the bringing into touch with one another of people who have got considered commercial and industrial schemes with those who are in search of profitable investments. It has got on its register the names and addresses of persons who have got either profitable schemes, or capital to invest. In a number of cases successful partnerships have been established by the Bureau, and it functions as an active clearing house of money and ideas, besides supplying all educational information, and even apprenticing many young men to arts, crafts, and trades in Lahore.

Sir Ganga Ram was the kind of man who pursued every idea to its logical conclusion, and, just as in the case of the widows he went on founding home and school and shop and ashram until all were looked after, so in the case of the educated unemployed he pushed his schemes further and further forward as the need arose. More than once, when interviewing the countless young men who came to him, he was filled with a sense of the incompleteness of the education open to them. If a man liked manual work, he could be put to manual work; if he was of average intelligence, he could find his place in a technical school, but time and again came into contact with highly educated men whom only a college education would satisfy, and for them nothing existed save the old useless impractical education that the colleges in their hundreds gave.

It was thus that he conceived of the idea of a College of Commerce, and he went again to the Governor and offered him a few lacs of rupees for this great work. Sir Malcolm Hailey, after whom the College was named, very much appreciated Sir Ganga Ram's generosity, and became one of his most understanding friends.

To-day streams of students throng the corridors of the Hailey College of Commerce, and fill its classes, and behind them, unseen, stands the mighty figure of Ganga Ram, happy in the child of his creation. As Pandit Malaviya said, there was no Indian whose heart was so much moved by the sad plight of the educated unemployed as Ganga Ram was. Who knows? Perhaps at the back of his mind, every time a young boy came into the room, he saw the young student who had struggled on a starvation allowance to get his education in Lahore, or who had walked as a boy in the midday sun to earn a few annas to keep the household running. The past was too near to deny it, and his heart was too open to the troubles of the world to put them coldly on one side.

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As Sir Edward MacLagan had said when he was opening Ganga Ram's Triple Project, for the widows of Lahore and the Punjab, Ganga Ram had two great desires—to help the widows and to further higher education for women in the Province. When the work for the widows had been

satisfactorily organised, it was to the question of Girls' Education that he next turned his attention. He was not however to see the launching of that scheme and it was only after his death that the Members of the Trust appointed a special Sub-Committee of experts to frame a suitable scheme for a modern Hindu Girls' School, which would give a sound modern education, while keeping in view Hindu ideals and culture. The Report of the Sub-Committee was adopted in December 1929 and an Executive Committee of the School was framed to take the necessary steps to open a school on the lines indicated in the Report. The school was finally opened on the first of May 1930.

To-day the school, under the able guidance of Miss Chattopadhyaya, has set up new standards for girls' education. The curriculum from the lowest classes is designed to educate the women of the future. The kindergarten classes are run on Montessori methods, music is compulsory all through the school, and games and physical culture specially emphasised. In this school for the first time in the Punjab a sensible and attractive school uniform has been introduced, which has democritised the girls, and weaned them away from their fondness for show and jewellery. The neat blue dresses, the *salwar*, *kamees*, and the white scarf, combined with the efficient blue bus that carries them all to their studies make an impression of modern efficiency and energetic effort that is not easily forgotten and

is hundreds of miles away from the dark, and unimaginative schools which in the past have produced girls who are a travesty of all that Indian womanhood should be. In this school, the real women of the future are being educated and the Punjab will see the result of this institution not now, but many years hence when its students have taken their place as members of society.

When organising his charitable donations, Ganga Ram did not forget his first love, Agriculture. In 1926, he handed over to the Government the sum of Rs. 25,000 for the endowment of a prize to be awarded for the discovery of the invention of a practical method to increase the profits on agriculture in the Punjab. It is administered by a Managing Committee consisting of the Vice-Chancellor of the University, the Agricultural Advisor to the Government of India, the Registrar of the Co-operative Societies in the Punjab, Sir Ganga Ram, or (after his death), a nominated member of the Sir Ganga Ram Trust and the Director of Agriculture, Punjab, who was to be its Convenor and Secretary.

The prize was called the Maynard-Ganga Ram Prize and is awarded every three years provided a satisfactory achievement is reported to the Managing Committee. Its value is Rs. 3,000 and it is open to anybody living anywhere in the world.

Ganga Ram was now seventy-six, and he had given away more than three million rupees, but, in his own mind, his charities were not complete until, in April 1927, he opened the Hindu Apahaj Ashram. When he had given the blessing of food and shelter to the servant Kalu in his old age, he had realised that he was only a representative of a class—the class of men and women who find themselves left stranded by life as they grow old and infirm, who have no home to which they can go, and nobody to look to to provide their daily food.

His own home, Ganga Niwas, so dear to him, meant nothing to him if he could not feel that others too had the boon of a friendly roof, somewhere to rest their tired head after a day's work well done. It was in this way that he conceived the idea of an Ashram for the old and the infirm. To this project he gave deep thought and personal care, and ultimately decided on a site on the Ravi Road. Two acres of land were bought, and an Ashram was constructed at a cost of Rs. 1,50,000. Here all who were destitute could get shelter, food, and clothing, and the doors were shut to nobody save those who were professional beggars or who had some infectious disease. Some invalid children were also admitted to the Ashram, and a special Matron was employed to look after them.

Well-fed and decently clothed, the inmates pass their last days in peace and contentment in this Ashram, which is situated next to the Widows'



ASYLUM FOR THE AGED

Ashram, the institution nearest to his heart. There they can read and listen to the music that is provided for them, there they can pray and talk and rest in peace, unconcerned for their bread. For those who are ill medical attention is provided and doctors from the Sir Ganga Ram Hospital visit them regularly.

Typical of his many quieter charities is the "Poor Hindus' Relief Fund", which was really a consolidation of his many private charities to those who were in need of money but could not take advantage of an institution. The money was mainly given to widows and children, and the pension rarely went to more than Rs. 5 per month, although in exceptional cases it went up to Rs. 15. In this way nearly five thousand rupees a year was given out.

To his silent giving, there was no end. Hundreds came to his door, and few if any were turned away unprovided for. In periods of scarcity and high prices, particularly high wheat prices, he opened relief shops. From his early service days he had distributed warm clothing and blankets to the poor on a large scale. At Christmas time, he gave money to the St. Isabel's Charity Association in Bombay which provided for the poor and needy of all creeds and nationalities. We have it on the authority of Mr. B. L. Rallia Ram that he constantly helped the Y.M.C.A. and the Salvation Army when they were in need.

It was not as a speaker that Sir Ganga Ram will be remembered, but as a doer and a giver. Words meant little to him except as so much raw material which he had to use, in order to express himself when it became necessary to do so. In many ways he made his influence felt, and few knew of the amount or depth of his charities. Many families which had seen better days received from him handsome help, regardless of what community they belonged to, and the money was given and accepted in the spirit of true friendship.

A very near friend of his is responsible for a story about a European officer who had helped him in the early years of his career. "Eventually when Ganga Ram visited England for the second time to further certain projects of irrigation, he told me privately that there he had heard that the above-mentioned European officer who had patronised him had lost all the money which he had collected while in service, and afterwards as a contractor in the Punjab and the Bombay Presidency and had been compelled to go to a Poor House notwithstanding the fact that he had two sons holding high offices in India or elsewhere. On hearing this, my friend approached his old patron and related to him in a most respectful manner how he had become a millionaire after leaving service, and begged him to allow him to settle a decent pension on him for the rest of his life."

For his servant he had the greatest affection and

in all his friendships he was guided by deep feelings of loyalty for those who had at any time helped him or done him a service. He never forgot a good turn. In a country conspicuous for its bad treatment of domestic servants, he behaved as few others have done. In his will the income from three squares of land was set aside to be divided among all his servants in their lifetime, and in his private fund were many who had served him and been amply rewarded.

Ganga Ram's loving thought for those who had been in personal attendance upon him and who had accompanied him throughout his life put the capstone on the grace and beauty of his giving. Beneath the associations and institutions that he founded, the facade of his charities, ran the stream of his giving, still and deep and refreshing, bringing joy to all those who stood in need. The money that Ganga Ram earned he called "mother's milk" since it came from the land, and like mother's milk he sent it again to the poor and the helpless, the unprotected and the worn.

“ By all the glories of the day
And the cool evening’s benison . ”

—*William Noel Hodgson*

CHAPTER XVIII

THE DAY'S FULFILMENT

THE last five years of Sir Ganga Ram's life was a period rich in the recognition it brought him. Beginning with the knighthood which he received in 1922, the years brought a continuous procession of honours. The Punjab Engineering Congress of 1924 extended an invitation to him to guide its deliberations as President, and his address there set new standards of constructive engineering before the young engineers of the Province.

In the words of Sir Lionel Jacob, a distinguished engineer of the Punjab service, and a long-standing friend of Sir Ganga Ram: "Too often has it been that Presidents spin out a long-winded and dull account of the general progress of the Province, and say nothing at all of their own views and experiences. Sir Ganga Ram was no accomplished orator, nor had he any grace of diction in writing in English, but, when he had anything to say, he could say it very lucidly and in his address he spoke, as it were, out of the mouth of his own wounds."

"It was an excellent address," said *The Punjab Engineering Journal*, "and not the less so because

the speaker spoke his own thoughts and experiences. It is always a pleasure to hear what a veteran engineer like Sir Ganga Ram, who has done so much good work in his time, has to say. He claimed, as he had joined the Department in 1873, to be a living record of half a century of Public Works in the Punjab.... There have been many changes in the Buildings Department, which is now reinforced with specialists in the shape of an architect, a sanitary engineer, a roads engineer, and a drainage engineer, leaving, as he said, the rest as a mere shell.

Regarding the Railways, he said, the mileage had increased from 519 in 1873 to 4,067 in 1920; and the aim of the future, notwithstanding the difficulty of reconciling two conflicting things, was economy in initial cost and working expenses, and at the same time improvement in the comfort of passengers. He also suggested that in the place of unsightly corrugated iron, reinforced slates might be used in railway buildings.

Then, with his mind which could never long wander away from his beloved agriculture and agricultural engineering, he laid stress on the amount of potential energy from canal falls going waste. He explained in detail his new idea of bringing the power of low falls into use, and referring to the Irrigation branch of his service, he appealed for more attention to agriculture, and more sympathy for the cultivators. It was a little touch that was badly needed. He realised that there was a new tendency

for canal officers to ignore the importance of agriculture, and to avoid the long hours with the agriculturist which used to be a feature of canal life.

He told his brother engineers (with that infectious enthusiasm for his work which never failed to be inspiring) that it was lucky for them that they had chosen engineering for their career; it was a notable profession, and its aims were the material progress of the world. It was the only profession, he considered, which could save a man from being dull in his retirement.

It had certainly saved Sir Ganga Ram from being dull. He had retired from Government Service in 1903, and in that period of over twenty-two years, his unceasing activities had brought health, wealth, and happiness to thousands. Such gifts to humanity are not the fruit of idleness.

Two years before this, when Sir Ganga Ram in Simla had been reading out a paper on "The Agricultural Problem in India", he had advocated a Commission to enquire into agricultural matters, and Sir Edward Maclagan, who presided at the meeting, said that, if there were such a Commission, one of the terms of enquiry should be "How India can produce more Ganga Rams". It was prettily put, as *The Indian Journal of Engineering* remarked, for though there may be a need for such a Commission, there is more need for men such as Ganga Ram has proved himself to be. "Sir Ganga Ram as an engineer," the same journal continued, "was not

only endowed with great natural abilities, but he was a man who had used the abilities he had with very remarkable success both as an officer of the Public Works Department and outside it. There has been no engineer in India, who, after a long period of Government service, has struck out on a line of his own, with such satisfactory results. He has been accused of being a man of many fanciful but not always useful ideas, but, although there is all the difference in the world between the man who professes and the man who performs, the man who thinks things and the man who does things, no one can say that Ganga Ram's fertile brain produced only unfructuous ideas."

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A man of action in every sense of the word, Ganga Ram had a thoughtful and studious side to his nature which also took its toll of his energy and activities. His association with the Punjab University goes as far back as his service period in Lahore. "When I appeared in my Intermediate Examination", relates Sir Sundar Singh Majithia "he was the examiner of the Mathematics paper, in which subject I believe I passed probably through his kindness, because, so far as I recollect, I might have been on the border line of the Pass List."

With the years, the connection grew more intimate and direct. He was made fellow of the Punjab University, and took a keen interest in the proceedings, particularly showing how helpful he

could be in the newly-constituted Agricultural Faculty, which he regards as his "child", to be nurtured with great care. The buildings of the University were also partly under his care, his advice often being sought, and as Honorary Consulting Engineer numerous fine buildings, such as the Maynard Hall and the Hailey Hall, were erected under his supervision.

In 1925, his services were demanded by the Government for the Imperial Bank of India and he was made Governor of the Imperial Bank of India (Northern Circle), a signal honour, and a tribute to his great integrity and mathematical brain.

It was during this period, too, that he co-operated in the founding of Model Town, a garden suburb of Lahore. The impress of his ideas in planning and encouraging the scheme is always acknowledged with gratitude and affection by Diwan Khem Chand, who originally conceived this idea. He has many a lively anecdote to relate of his contact with the great engineer.

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Although, in Ganga Ram's scheme of life politics had second place—and a very poor second—it is only fair to say that, when the necessity arose, he came into the political field, if indirectly, to help the Sikhs out of agonising persecution, and the Government out of an awkward position.

The 'twenties were a period of mass awakening and opened a new page in India's history. The

Sikhs, many of whom had returned from the battle-fields of France and their first visit to the West, were undergoing a thorough re-orientation in their ideas. Their enquiring mind soon found something to question in the matter of the custodianship of their places of worship. Matters came to a head in the affair of Guru ka Bagh.

Guru ka Bagh was a temple about twelve miles from Amritsar, and the authorities claimed the property as their own. The Sikhs strenuously denied this, and a clash occurred which developed into a major trial of strength between the Sikhs and the British. The British depended on the point of the bayonet, and the Sikhs, absolutely non-violent, on their splendid courage and the swarming numbers of those who were ready to lay down their lives for the sake of their rights in their place of worship. Repression, the like of which has been seldom recorded, even in Colonial Countries, followed, but the Sikhs did not show any sign of wavering in their resolve. The whole affair assumed serious proportions: among the Sikhs it was a signal for the highest religious fervour, and a major mass movement threatened to develop. The machinery of administration faced the threat of paralysis.

At this juncture, Ganga Ram came forward, and, in the words of Sir Edward Maclagan, ex-Governor of the Punjab, "he, of his own motion, made a proposal to the Government that, in order to bring to an end the impasse created by the Guru ka Bagh

incident, he should secure a lease of the Mahant's Land, and having secured this, he, as lessee, should permit the Akalis to have access to the shrine. In this transaction, he was actuated by philanthropic motives, and the Government was relieved from a disagreeable situation."

That, in spite of adverse criticism, he was really moved by the best motives is amply borne out by the testimony of those who knew him, and it will be readily believed when it is remembered how close were the ties that had always bound him to the Sikh faith, through the old *sadhu* at Mangatwala to the Golden Temple in Amritsar, and his later gifts of Gurdwaras to the Sikhs.

"I can easily recall," said Sir Jogendra Singh, "how deeply he felt for the Sikh community when the Gurdwara movement was in progress. Tears used to flow from his eyes when he talked of his poor fellow-countrymen, and he was always ready to find some way to help out of difficulties." It is, however, in the words of those who actually fought in that battle that we find the most authentic testimony to his goodness of spirit.

Sardar Bahadur Sardar Mehtab Singh, an ex-President of the Sharomani Gurdwara Parbandhak Committee, the chief executive body of the Sikhs which conducted the fight writes that "Ganga Ram paid visits to me in Amritsar Jail during my confinement in the Guru ka Bagh affair. He sincerely and whole-heartedly desired to effect a settlement

between the Sikhs and the Government. He wanted me to accompany him to Sir Edward Maclagan, and to suggest improvements in the Gurdwara Bill then before the Punjab Legislative Council. I declined to do so, on the ground of being a prisoner in jail and *functus officio* as the President of the Sharomani Gurdwara Parbandhak Committee. In the end he obtained the lease of the disputed property and afforded the Government an opportunity to wriggle out of an untenable position. We were furious against him, and I called and cross-examined him in Court. He made a clean breast of the whole affair. From his statement it was quite clear that he was not actuated by any selfish motive, but through tenderness of heart. From that time I have known Sir Ganga Ram as he really was. I blamed him much for his action in the Guru ka Bagh affair, as it extricated the Government from a critical position, and enabled it to detain thousands of Sikhs in jail with impunity. He shed many tears, and sometimes cried like a child in pain when assuring me that he had received definite promises of release which were not being fulfilled. I found him in a very happy frame of mind when the general release of Guru ka Bagh prisoners was carried out in the end of April 1923. After that too he had been approaching the authorities for the release of other Sikh prisoners, and has had frequent conferences with *Panthic* workers for the purpose."

In the words of Sardar Mangal Singh, the

Editor of the Sikh organ *Akali* in 1927: "Everybody knows that it was he who took the Guru ka Bagh land on lease in 1923 and brought that famous *morcha* to a successful termination. In doing so, he was actuated by the best of motives, and he saved both the Sikhs and the Government from a situation which was a source of suffering for the Sikhs and an awkward position for the Government. I personally know that he wanted to do the same thing in the case of Bhai Pheru *morcha*, but His Excellency the Governor intervened and dissuaded him from doing so. I met him for the first time in 1926 (May) in his house. He addressed me like a loving father in idiomatic Punjabi saying: 'Why are you people going to jails? Is your mother sitting there giving you food to eat?' He was very anxious that relations between the Sikhs and the Government should be improved."

"His great regard for the Sikh *gurus* made him found two or three good Gurdwaras, which he decorated at his own cost" writes Sir Sundar Singh Majithia. "He never stinted money in a good cause. Just before he sailed for England he asked the Chief Khalsa Diwan to take charge of a pukka-built Gurdwara at village Rampura, on the Grand Trunk Road, some twelve miles out from Lahore towards Amritsar. I wrote and suggested to him that he should endow this fine Gurdwara that he had built. In a jocular vein, he wrote back to me that the Sikhs only knew how to beg or quarrel."

We are given an intimate glimpse into his mind by Sardar Mehtab Singh, who gives an account of some of the ingenious ideas which he had about the Sikhs. He had a tremendous personal liking for them as a community, and love and reverence for the Sikh faith was in his very bones.

"He has built the sixth Guru's Gurdwara at Amar Sidhu" writes the Sardar Bahadur, "with a splendid *pukka* tank. The Gurdwara is near the Lahore Cantonment and the Model Town, and will prove of great benefit to the public. He has also built a *pukka* up-to-date Gurdwara at Rampura on the road between Lahore and Amritsar and has attached a traveller's *serai*, rest-house and well to it. He purchased a bungalow in Chhota Simla for a Gurdwara, and told me that he would build a Gurdwara every year as long as he lived. He was the greatest practical advocate of the widows' cause in every shape and form. He wanted widows from Bengal to marry the Sikhs from the Punjab, and thus combine, as he said, physical vigour with intelligence for the service of the country. He wanted the Government to enlist Sikh boys for the army at the age of ten and then educate and train them properly by means of scholarships. They were to be on active service from the age of eighteen to twenty-one, when they were to become citizen soldiers to be called on in times of emergency. He was maturing a plan for a purely Sikh colony on one of the newly projected canals when he left for England He

had scores of schemes in his brain on which he used to lecture me when he used to take me round to the various charitable institutions that he had started and the several Gurdwaras that he had built. He used roundly and soundly to abuse me and his son, Sewak Ram for our criticism of the Government in and out of Council, and wanted us to give up the life of agitators and to engage in constructive work of which the country stood more in need."

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He was nearly in his seventy-fourth year when he received the highest recognition of his work as an agriculturist with his appointment to the Royal Agricultural Commission. Old in years, his spirit was as young and vital as it had ever been. "I found him as jolly as he was in his college life" says a friend, "when I saw him last, just on the eve of his departure for England. He was quite hale and hearty, and chatted as cheerfully as ever. He had the same twinkle in his eyes and cheerful way of talking as he had when I met him about twenty years ago."

At station after station he was hailed by friends as the train took him on what was to be his last journey across the vast continent he loved so well, to catch the boat from Bombay. "Almost his last sentence," recollects Sir Sita Ram, "in the Railway saloon was both pathetic and unluckily prophetic." He said: "You young men are doing nothing . . . you ought to be doing what I am asked to do. I am

going to London at this age which I dread."

When he arrived in London a friend said that "he saw at first a little change in him, but he seemed to be just his old self, and as mentally alert as ever."

Once with the Commission, he got down to the very strenuous work it entailed with good grace, and invariably followed a day of strenuous work with visits in the evening to old friends, taking great delight in picking up the threads of former friendships. "I arrived here last week" he wrote from London to a friend, "on the Royal Agricultural Commission which meets every day except Saturday and Sunday, and the only time I get to see my friends is about five o'clock."

Even on these visits, he carried on his work as a missionary of agricultural advance. "He and his son Sewak Ram came to see me at 3 P.M. on the 8th of June" writes Sir Louis Dane. "He mentioned the big storage schemes in the Punjab as having attracted much attention in the Royal Commission on Agriculture, naturally especially from Sir Henry Lawrence from Bombay. The Jalalpur Canal scheme for irrigating on the right bank of the Jhelum down to Pind Dadan Khan and Khushab, with the power from the Upper Jhelum Canal to the River was put forward by him He is working at a scheme for injecting molasses with cane *bagass*, and getting about 158 tons of cattle-food per acre."

And, says Sir Edward Maclagan, "he was at my house with his son about a fortnight before his

death, showing me specimen of seeds and as keen as ever on agricultural improvement."

The old hero of many a great agricultural struggle kept up his energy in spite of what must have been continually failing health. Knowing as he did that extra work at this advanced age could not but have a bad effect he still went on doing what he considered the most important work of allgiving advice to those who could act in the matter about India's great and urgent agricultural needs. Every action he took in the last few months of his life was directed to this one end—giving the information which he alone could give to the Commission and educating the public as to the value of the work the Commission was doing. "Every rupee that India spent in carrying out the recommendations of the Royal Commission will bring thousands to the people in return" he said to a Press representative, and the message was flashed across to India. It was his final message to his countrymen, and a fitting memorial to the love which he bore the land and the cultivators of it.

" So be my passing !
My task accomplished and the long day done,
My wages taken and in my heart
Some late lark singing.
Let me be gathered to the quiet West,
The sundown splendid and serene,
Death."

—*W. E. Henley.*

CHAPTER XIX

GLORIOUS SUNSET

BUT round the grand old head of Ganga Ram the shadows of death were gathering thick, and being simple of heart and with his spiritual vision unclouded by the fogs of materialism, he knew of it. Before sailing for England, there is more than one instance of this premonition of things to come.

Every year, he would re-read, and if necessary revise, his Will in the presence of witnesses. Just before leaving for Europe in the early Spring of 1927, to take his place as a member of the Royal Commission on Agriculture, he was performing this yearly duty, and this time, we are told, he had tears in his eyes; and he said, on being asked the reason: "I fear I will not return to read it again".

Sir Malcolm Hailey also relates that when he was seeing the old veteran off on this, which was to be his last sea journey, he said "I shall not return to India again", and his eyes filled with tears. "One could not but agree," said Sir Malcolm, "that the chances of seeing him again were slender. But that did not affect his determination to carry to a finish the work on which he had embarked, and which he

knew to be of value to India ; nor could I find it in me to dissuade him. He knew, as we know, that his span of life was shortening, but he felt that he was embarking on yet another service to humanity ; and though we, his friends, might well have prayed that he would have been spared to complete it, we were too much his friends to do anything which would hinder him in attempting to achieve it."

The work for the Royal Commission in London indeed proved too much for his failing strength. The interminable meetings, the long hours of study at night, the strain and nervous tension involved in a work into which he was putting the last mite of his strength, ultimately led to a weakening of the heart, and finally to a collapse. He made a valiant attempt to rally, and for a time it was thought that he would succeed. His eldest son and secretary, Rai Bahadur Sewak Ram, cared for him in his last moments, with supreme optimism, but, as one of his oldest friends wrote, it was of no avail, and "the brave old heart that had carried him to victory in his many enterprises began to flicker out its life in gasps". He died in his London home when the dawn was breaking on the tenth of July 1927.

The cremation ceremony took place at the Golders Green Crematorium. Doctor K. S. Ayyar read the Hindu rites with great dignity and solemnity before a large and representative gathering of Englishmen and Indians. Rai Bahadur Sewak Ram, Rai Bahadur Damodar Das, and Diwan Anant Ram



"THE RESONANT VOICE WAS SILENT"

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Mehta were the chief mourners, and among others present were Lord Linlithgow, and members of the Royal Agricultural Commission, Sir Shadi Lal, Sir Walter Lawrence, Sir Thomas Ward, and Sir Atul Chatterji, his old service friends Sir Lionel Jacob, and Sir Louis Dane, Sir Michael O'Dwyer, Sir Edward MacLagan, Mr. S. N. Malik, and Mr. N. C. Sen. Telegrams of sympathy were read from Lord Reading, Sir Maneckji Dadabhoy, and Sir Henry Lawrence.

The solemn and beautiful hall where the cremation took place was filled with the scent of rare flowers, and with something more fragrant still—the spirit of Ganga Ram that enfolded the mourners with its love and beauty.....a great soul released from its earthly bonds and duties, and soaring to heights which the earthly mind and heart cannot reach. Truly “Blessed are the dead which die in the Lord”. Outside the rain fell in torrents and the thunder roared as though Heaven itself was saluting the dead hero with a salute of a thousand and one guns.

The resonant voice was silent, the piercing and yet kindly eyes closed in death, but there was something more than sorrow in the hearts of the mourners. For the death of a man rich in years and good works has joy in it too: here is the wealth of life unfolded, and death but the sunset of a glorious day. “It is no little matter,” as Sir Malcolm Hailey said, “to pass away from life when everything around

one speaks of a past well-spent, of a present enriched by universal esteem and affection, and when one knows that one's memory will be enshrined in honourable and grateful recollection. A man who can achieve that, can look on his end with small regret."

And from his friends and colleagues of the Royal Commission came what was perhaps the most touching tribute of all. Before Rai Bahadur Sewak Ram left for India, Lord Linlithgow, who was the Chairman, and was personally present at the funeral wrote to him of his famous father: "The wealth of his experience, his enthusiasm, his wisdom in counsel, and his indomitable courage, made his presence amongst us an asset of immeasurable value to the Royal Commission. His great qualities had already made their indelible mark upon our deliberations, and though Fate had decreed that he was not to live to see the conclusion of our labours, you may rest assured that the great contribution he had already made to the work will be apparent on the face of our report and recommendations, and that the heavy sacrifice involved by service so arduous in the face of advanced years, will not have been in vain."

"Many others, far better than I," he continued, "will testify to the great loss the Punjab and India have sustained by his death. The rare blend of accurate insight and executive courage which formed so striking an element in his character enabled him to achieve success in a particularly difficult field of

activity ; but his power of mind was only equalled by his goodness of heart, and his philanthropic and charitable actions have endeared him to a wide circle of beneficiaries and to unnumbered friends in his native Punjab and beyond."

It is indeed fitting that the finest and most heartfelt tributes should come from his fellow-workers, because it was while working that his character showed itself at its best, and it is in the solid value of his work and thought that he will longest be remembered.

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The sad news had reached Lahore by cable, and the Kirya ceremony took place on Friday evening, the twenty-second of July, at Ganga Niwas in Lahore. His second son, Lala Balak Ram, performed the ceremonies, in the absence of the eldest son, and besides the expenses of the ceremony, and money and clothes to the priest, over Rs. 7,000 were distributed in charity by his sons.

Rai Bahadur Sewak Ram, M.L.C. brought home the ashes of his father and reached Bombay on August 14th, 1927. He first travelled to Hardwar, and there, where the Holy Ganges flowed, its rushing waters cool as the mountain snows, the procession of mourners took the ashes to throw them to their last resting place. A flower-decked palanquin bore them shoulder high through the streets of the pilgrims' city, and his two sons fanned them until they reached the waters of Mother Ganges. In front of

the palanquin, the students of Rishi Kul, the Maha Vidyalā, Jawalapur, and other Hindu institutions chanted Vedic *mantras* in chorus. Behind, the traditional elephant in its gorgeous *howdah*, walked in solemn pomp. Ten thousand people followed in the procession, prominent among them being his old friend and fellow-worker, Raja Jawala Parshad, at that time Chief Engineer of the United Provinces. Women in their thousands, and many hundreds of widows with tears of gratitude in their eyes, threw flowers on the ashes as they passed.

At last, in the sacred pool of "Har Ki Pauri", the earthly remains of Sir Ganga Ram sank in bliss to their last resting place. The air was alive with the crying of the vast crowd..... "Garibon ke wali ki Jai", "Dan vir ki jai", "Vidhwaon ke Kewal Saharaj ki jai", "Punjabi Hatem Taji ki jai."

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On the fifteenth of August, Rai Bahadur Sewak Ram and his brother arrived with a few of the ashes in Lahore, to place them in accordance with the wishes of their father, on the site of the tomb which he had long ago planned near the Widows' Home and the Apahaj Ashram, the institutions he had loved so well. For, while some of his ashes might go to eternal bliss in the pure waves of Mother Ganges, it was his wish that part of them should remain to keep company with the poor, the unhappy, and the sick, who were being tended with his earthly possessions.

On that memorable morning, all Lahore seemed to wake with a sense of great happenings. The sky was clear and cloudless, and the citizens of the town Ganga Ram loved so well came for their last *darshan* of his ashes. It was an unforgettable sight. The Town Hall gardens were filled with the restless crowds of people, men and women, children and the very old who had grown up side by side with him, orphans and widows and the countless hundreds who had known his silent charity.

Magnificently caparisoned Kotul horses, shining with gold, champed at their reins. Groups of orphans in their lovely *Bhagwa* clothes, circled round chanting hymns and praising their patron. But their singing passed unheeded as the eager crowd strained its eyes for a first glimpse of the procession.

"There it is.....there it is....." The crowd was surging with excitement. The *dola* was on its way, radiant with freshly plucked roses, heavy-scented, the starry *motia*, and other fragrant flowers. Marigolds in golden profusion covered the sacred ashes, and round them the white-robed crowd rushed to help in carrying them along.

The long procession formed itself. Police on horseback were followed by the capering horses. Then came the Gatka party with their swirling sticks, and the Chhabeels that gave sharbat, cold and sweet, to the thirsty crowds. The holy music of the Bhajanmandlies pierced the morning air in exultant songs for the glorious dead, who had died full of

years and honour. Sons and relatives followed the flowering palanquin.

In the front of the *dola* was a picture of Ganga Ram, and all paid their last homage to it as they went along. The inspired "kirtan" of the Akalis moved the crowd to tears, and the long slow march was a triumphal procession. Through Anarkali and the Lohari Gate it passed, through the very heart of the City, and the streets were filled with those who longed to pay their last love and respects to the great man. The shops were closed, and milk and sweet drinks were freely offered as the *dola* passed by. The air was a mist of blossoms as the women who thickly crowded the balconies threw fragrant *motia* and rose petals on the passing crowds. The windows rained rose-water and from above it seemed as if a ship of flowers was sailing majestically on a sea of human heads. There was no more a street and building, but a moving block of human forms as the people in their hundreds and thousands crowded into the narrow streets.

All along the route, in the sweltering heat of the sun, there was sweet rivalry to bear, if only for a few moments, the precious burden of the *dola*. Along the long hot roads, every inch of the way, it was carried on the shoulders of volunteers.

And most moving of all were the widows, who came out of their sad homes, and wept and threw themselves in the path of the precious relics. Their friend, their helper, the one who had wept with them

was gone, and they feared that never again would they find a heart so child-like and so gentle to sympathise with their wrongs. "Widhwa ke Kewal Saharay ki jai." Their tears and their flowers followed him on this, his last earthly triumph.

"Garibon ke Wali ki jai," "Long live the Lord of the Orphans," "Victory to Him who was the Support of the Widows," Slogans rang and clashed and echoed through the streets of the City, down the wide road over the Ravi, to the *Smadhi* itself.

It was then midday, and the sun was burning. On the plinth of the *Smadh*, ninety feet square, had been erected a pavilion to intercept the fierce rays, and beneath it the two sons performed some rites. As soon as the sacred *dola* was placed on the *Smadh* thousands rushed forward to take a flower, a golden thread or a piece of cloth to cherish for the rest of their lives. Finally the casket containing the ashes was enshrined in the place allotted to it, in the centre of the marble tomb.

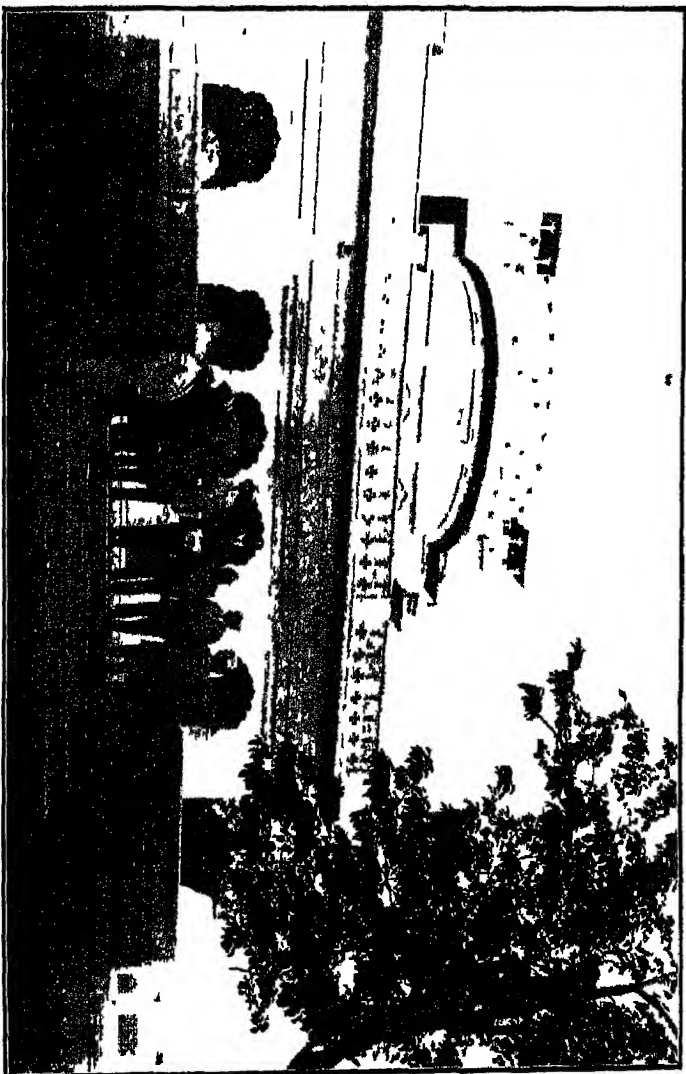
All day long the free kitchen provided food for the poor who thronged in their thousands, filling the gardens near the *Smadh*. Many sat for hours, weeping and talking of their benefactor. The people of Lahore had come, one and all, to pay their last respects, rich and poor, officials and unemployed, the propertied and the homeless, and to give names would be to name the sands on the seashore. One and all were there, and the sorrow of all was equal,

for all were his friends.....of all castes, of all communities, of all kinds.

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It is round the *Smadhi*, the Apahaj Ashram, and the Widows' Home, clustered together on the banks of the Ravi, that memories will persist. For there rests his human heart and his divine love for the unhappy and the broken of life.

"We went over his farm at Gangapur," said Sir Malcolm Hailey at the Memorial Meeting over which he presided, "and wandered there through field after field ripe with a wonderful harvest of wheat, the fruit of careful cultivation and scientific methods of husbandry. We saw all he had done, not only to improve the land but to render healthier and happier the lives of his tenants. And coming back to Lahore in the late summer evening, we stopped at a gateway beside the old stream of the Ravi, and entered the quiet and peaceful grounds of the Apahaj Ashram lately founded by him a home for homeless men and women. Looking back on that day, I see in it much that was typical of Sir Ganga Ram's own life and character. His Gangapur farm, like so many of his successful enterprises in land, was a proof of his courage, enterprise, and independence of mind..... But, if Gangapur is typical of the morning and the midday of his life, then the Ashram is no less typical of its evening. For with all his enterprises and vigour in business, he had the heart of a little child; and each succeeding success in life meant for him only a



MEMBERS OF THE TRUST AT SIR GANGA RAY SWADH

new means of gratifying his tender sympathy for others, and his very human desire to spread peace and happiness around him. If his spirit hovers now over the scenes of his long life and triumphs in the Punjab, it will linger longest and most fondly over the Home where the Hindu widows find refuge from their sad lot, over the Free Hospital where the bread-winners are given back in health to anxious families and children restored to heart-stricken parents, over the Apahaj Ashram where those who have been broken in life's struggle pray in security and gratitude for the soul of one who believed that Heaven had only sent him prosperity in order that he might succour them that suffer and are distressed."

So it is fitting, now, that every year, on his birthday, on Baisakhi Day, a great fair is held at the Ganga Ram *Smadh*, and that people in their thousands crowd again to do him homage in the spot which he loved best. There two tanks, one for women and the other for men, are filled with fresh water, and there the shady gardens all the year round give comfort in the heat of the day.

At the fair, *havan* is performed, and the Gita read, musicians from all over India come to pay their homage, and poets to sing their verses. Sports and displays of physical training entertain the large crowds and free food is available for all who come. For many long years to come, it will be in an atmosphere of joy, on the New Year's Day, that the

people of the Punjab will perpetuate the memory of one of its greatest sons and meditate on the great good he wrought in the land of his birth.

To those who live selflessly, and serve their fellowmen, the end of the day of life is full of peace and joy, shining with the colours of the glorious sunset. And countless are those who will come and wonder, and bathe in its reflected radiance.

APPENDICES

APPENDIX I

THE RELATION OF WATER TO AGRICULTURE

Sir Ganga Ram had worked out through experience his own system of watering the crops. It was based on efficiency and economy. Here is the statement in his own words showing the number of waterings found to give the best results :

Cotton	.... 6 to 8
Toria	.... 2 to 3
Sugarcane	.... 8 to 10
Wheat	.... 3 to 4
Gram	.... 1 to 2
Makki	.... 4 to 5

and the following delta for each crop which is found to give the best results is as follows : this is assuming that there is absolutely no rainfall:—

	Inches.
Wheat	.... 18
Toria	.... 15
Cotton	.... 30
Chari	.... 24
Makki	.... 24

	Inches
Sugarcane	.... 40
Senji	.... 12
Masur	.... 12

The following disposition of crops is found in practice to be the best :—

	Acres.
Wheat	.... 40
Toria	.... 15
Cotton	.... 20
Chari	.... 6
Makki	.... 6
Sugarcane	.... 1
Senji*	.... 6
Masur	.... 6
Total	.... 100

Therefore product of delta and acreage as follows :—

Wheat	....	$40 \times 1\frac{1}{2}$	60
Toria	....	$15 \times 1\frac{1}{4}$	18.75
Cotton	....	$20 \times 2\frac{1}{2}$	50
Chari	....	6×2	12
Makki	....	6×2	12
Sugarcane	....	$1 \times 1\frac{1}{4}$	1.25
Senji	....	$6 \times 1\frac{1}{4}$	7.5
Masur	....	$6 \times 1\frac{1}{4}$	7.5
Total	....		169

Now my experience is that, if a liberal supply

* Senji to come in place of Chari and Masur in place of Makki.

of water was given for six months in the year, the delta required in the above disposition of crops can be obtained with a little margin and I propose that half a Cusec should be given for 180 days for 100 acres. The calculations will therefore stand as follows:—

$$\frac{1 \times \underline{60} \times \underline{60} \times \underline{24} \times \underline{180}}{43560 \times 100 \times d} \therefore d=1.78$$

Thus if the turns are so arranged that no one gets water more than 180 days in the year subject to such fluctuations as the state of rainfall warrants, one cusec can easily do 400 acres. The arguments in favour of this proposal are that *double the quantity of water as now supplied given in half the time will ensure better command, less loss in absorption and evaporation, and hence better crops.*

APPENDIX II

TRUST-DEED OF SIR GANGA RAM TRUST

This Indenture made this second day of April, one thousand nine hundred and twenty-three between Sir Ganga Ram, Kt., C.I.E., M.V.O., R.B., hereinafter called the Founder of the first part, and

1. Sir Ganga Ram, Kt. R.B., C.I.E., M.V.O.
2. The Hon'ble Sardar Bahadur Sardar Sundar Singh Majithia, C.I.E., Lahore.
3. Rai Bahadur Lala Sewak Ram, Bar.-at-Law, Lahore.
4. Mr. Balak Ram, Bar.-at-Law, Lahore.
5. Dr. Alakh Behari Arora, Medical Officer of Health, Lahore.
6. Rai Bahadur Lala Badri Das, M.A., Vakil, High Court, Lahore.
7. Mehta Bahadur Chand, M.A., Vakil, High Court, Lahore.
8. Lala Rangi Lal, M.A., District and Sessions Judge, Lahore.
9. Dr. B. J. Sahni, L.R.C.P., D.P.H., Rattigan Road, Lahore.

10. Lala Nand Lal, Manager, Sir Ganga Ram's Landed Estate, P. O. Dhooniwala.

11. Lala Lajpat Rai Sahni, B.A., MacLagan Road, Lahore.

hereinafter called the trustees, or Sir Ganga Ram Trust of the second part.

Whereas by two sale deeds dated the second day of February one thousand nine hundred and twenty the Founder purchased for the sum of about Rupees fifty-six thousand five hundred and sixty from Lala Lachhman Das, son of Lala Gulzari Lal, caste Aggarwal two properties adjoining each other in Kucha Sidhu Missar, Bazar Kanjar Phalla in the city of Lahore, and at his own expense erected on the site the two properties aforesaid a big block of buildings hereinafter called the hospital at a cost of Rupees seventy-five thousand, including equipment.

And whereas by an indenture dated the seventh day of April one thousand nine hundred and twenty-one between Sardar Dyal Singh Library Trust Society of the first part, and the Founder as purchaser of the other part all that land and buildings with the outhouses, garden, compound belonging thereto commonly called the "Exchange" and hereinafter referred to as "Exchange" situated on the Upper Mall Road, Lahore, containing by admeasurement twenty kanals, two marlas one hundred and sixty square feet, more or less was purchased by the Founder for a sum of about Rupees four lacs and seventeen thousand,

And whereas the Founder has by oral gifts on the second day of April one thousand nine hundred and twenty-one assigned, and vested the Sir Ganga Ram Free Hospital, and on the first January one thousand nine hundred and twenty-three the Exchange together with the shops and buildings recently erected on the Exchange by the said Founder at the cost of about Rupees four lacs, to and in the trustees. To hold the same unto, and to the trustees upon trust to permit the same to be appropriated, and used in perpetuity under the name of Sir Ganga Ram Trust.

And whereas the Founder is also desirous of conveying other movable and immovable properties to the trustees upon the same trust.

And whereas it is necessary that the objects, and conditions of the said Trust be permanently recorded, and provisions made for the selection of trustees in future in place of any present, or future trustee dying, resigning or otherwise becoming incapable to act as such trustee.

Now these present witness as follows ; that is to say:—

1. In the interpretation of this agreement unless repugnant to the context, the singular shall include the plural, and the following words and expressions shall have the following meanings, unless such meaning shall be excluded by the subject, or context, that is to say:—

“ The trustees ” mean the trustees hereto of the

second part, and the survivors, or survivor of them, or other of the trustees, or trustee for the time being of these present.

"The Trust" means Sir Ganga Ram Trust hereby constituted.

"The Trust properties" mean and include the Exchange, and the Sir Ganga Ram Free Hospital (fully described in Schedules A and B herewith attached), and all buildings and property or properties that may hereafter be conveyed, or otherwise assigned to the trustees in perpetuity for Sir Ganga Ram Trust.

"Hindu" includes a Sikh, a Jain, and every member of any schism or off-shoot of Hinduism.

2. The trustees shall hold the trust property upon trust to permit the same to be appropriated, and used in perpetuity under the name of Sir Ganga Ram Trust in conformity with the provisions of these presents.

3. The said trustees shall permit the said Founder to build, or rebuild at his own expense on all land appertaining to the said Exchange, not recently built upon, and may permit him to make such alterations or modifications in any buildings appertaining to the Trust, as the said Founder, and the trustees may think proper.

4. All such buildings built, or rebuilt, and all such modifications, or alterations made therein by the said Founder under the power given to him by clause 3 hereof shall vest in, and appertain to the Trust.

5. The Hospital known as Sir Ganga Ram Free Hospital shall continue to be used by the trustees for the purpose of granting free medical relief to the poor without any distinction of caste, creed, or colour.

6. All expenses for the year one thousand nine hundred, and twenty-three connected with the following, that is to say:—

(a) The Vidhva Vivah Sahaik Sabha—A society established some years ago by the Founder for the purpose of carrying out the objects hereinafter fully described in clause 9 (i) (a) hereof;

(b) The Hospital known as Sir Ganga Ram Free Hospital established some time ago by the Founder for the purpose of carrying out the objects hereinafter fully described in clause 9 (i) (b) hereof;

(c) The Hindu Students' Career Society lately started by the Founder for the purpose of carrying out the objects hereinafter fully described in clause 9 (i) (c) hereof.

Shall as hitherto be met by the Founder, but shall be expended under the supervision, and management of the trustees.

The income arising from the Trust properties during the year nineteen hundred twenty-three shall as hereinafter explained in clause 9 be reserved for, and expended during the year one thousand nine hundred twenty-four.

7. The number of trustees at any time shall be not more than eleven, nor less than nine as the trustees may think fit. Should the number of trustees

at any time become less than nine the trustees shall forthwith proceed to elect new trustees as hereinafter provided.

8. A meeting of the trustees, to be called the annual meeting, shall ordinarily be held in the month of January each year. The trustees shall also hold, from time to time, such other meetings as they may consider necessary for the transaction of such business in hand.

9. (i) At the annual meeting in each year, the total net income for the preceding calendar year from the Exchange Buildings the Daulat Buildings and such other properties as have been, or may hereafter be added for the purpose shall, after defraying the cost of all repairs required for maintaining the Trust properties, and the Founder's Smadh, when the said Smadh is made over to the Trust, in good condition, and of insuring the Trust properties against loss by fire, and all other costs, charges and expenses of, and incidental to the administration, and management of the Trust and after contributing to the sinking fund as hereinafter provided, be allotted as follows:—

9. (i) (a) A sum not less than Rs. 15,000 shall be reserved for the purpose of, and expended during the course of the year, in promoting generally the cause of the widows' remarriage, and so as eventually to bring about the removal of the existing prohibition and prejudices against remarriages of Hindu widows, and in the solemnization of the said remarriages.

9. (i) (a) A sum not less than Rs. 20,000 shall be reserved for, and expended during the course of the year in granting free medical relief to the poor without distinction of caste, creed, or colour through the said Hospital, or otherwise.

9. (i) (c) A sum not less than Rs. 10,000 shall be reserved for, and expended during the course of the year in the maintenance, and equipment of Sir Ganga Ram Business Bureau and Library, Lahore in placing within the reach of Hindus, literature, information, and facilities for practical training calculated to fit them for a career of self help, and in helping such Hindu students domiciled in British India as are in the opinion of the trustees deserving of help by way of scholarships refundable, or non-refundable with the object of enabling them to prosecute professional studies other than those purely legal.

Provided that no scholarship will be tenable outside India. Provided also that in selecting the candidates the trustees shall give preference to those who are in sympathy with, and are likely to promote the objects of the Trust.

9. (i) (d) Ten per cent of the net income of the properties of the Trust shall be set aside towards the formation of a sinking fund till it reaches the sum of Rupees four lacs.

Provided that during the lifetime of the Founder the said sinking fund, and any residuary balance may be utilised in such manner as the Founder may direct

9. (i) (e) If in any year the available income from the properties set apart for the objects set out above falls short of Rs. 45,000 the minimum sums reserved for the three objects stated in para. 9 (i) (a), (b) and (c) respectively will diminish proportionately.

Provided that if on account of some temporary cause the available income in any year is reduced to a sum with which it is not practicable to carry on the objects set out above, the trustees may borrow the necessary funds from the sinking fund and repay the loan in subsequent years in a lump sum, or by instalments.

9. (ii) At the annual meeting in each year the trustees shall further allot the income for the preceding calendar year from 160 shares of the Punjab National Bank, Ltd., and 500 shares of the Central Bank of India, Ltd., and such other funds, and properties as may hereafter be added for the object hereafter mentioned in this paragraph to be spent in:—

(a) Helping poor Hindus.

(b) Helping such of the Founder's father's descendants as are now alive, and as may be deserving of help by monthly payments of such sum as the trustees may fix in that behalf.

Provided always that if the trustees think advisable, these allotments, or part thereof may be utilised for all, or any of the objects specified in 9 (i) (a), 9 (i) (b), and 9 (i) (c).

(c) The trustees may hereafter take charge of

any trust for charitable or philanthropic objects, or if the Founder desires for any other purpose not inconsistent with the objects stated in para. 9 (i), and may administer the same according to the directions attached to the same by author thereof, provided that no part of the income of the properties described in paragraph 9 (i) and 9 (ii) above together with such other properties as may be added thereto for the objects stated therein shall be spent in the maintenance of the trust taken over by the trustees under this paragraph.

10. When the persons mentioned in sub-clause 9 (ii) (b) of the preceding clause are all dead, or when they cease to deserve help, and when the sinking fund shall have amounted to a sum of Rupees four lacs, the trustees shall have full power to allocate, or distribute the amounts now allocated to clause 9 (i) (d) and 9 (ii) (b) to any of the objects given in 9 (i) (a), (b) and (c).

11. Except as provided in clause 10 hereof, the limits of expenditure of income on the various charities fixed in clause 9 (i) and (ii) shall not be modified, or altered by the trustees unless at least seventy-five per cent of the trustees for the time being agree in a meeting, specially convened for that purpose to the specific modifications, or alterations.

12. The balance of any sum allocated by the trustees to any of the objects, mentioned in clause 9 (i) and (ii) hereof, remaining unexpended for the space of three years shall after the lapse of this period be redistributed in the year following as if it were a

part of the net income from the Trust properties in the previous year.

13. The capital, and income of the sinking fund provided by clause 9 (i) (d) hereof shall be applicable by, and at the discretion of the trustees to the extraordinary structural repairs of all buildings appertaining to the Trust, or in altering, improving or rebuilding or making additions to the same, or any of them, and also in recouping any loss, or estimated loss arising either upon the sale of or by reason of depreciation (provided such depreciation be likely in the opinion of the trustees to be of a permanent and not merely temporary character) in any of the said investments representing the sinking fund, and if in any year any of the income of the sinking fund shall not be required for any of the purposes aforesaid, the same may at the discretion of the trustees either be added to the capital of the sinking fund, provided the said fund does not exceed the total sum of Rupees four lacs and invested accordingly, or be allowed to fall into, and be applied as a part of the income of the Trust properties as provided by clause 9 (i) hereof.

14. In the event of the properties mentioned hereafter in clauses 43 and 44 hereof reverting to Sir Ganga Ram Trust, a sum not exceeding Rupees four lacs out of sinking fund shall be set apart by the trustees for the exclusive purpose of maintaining the institution or institutions to which the property so reverting belongs.

In case the sinking fund does not amount to the

required sum when the property or properties mentioned in clauses 43 and 44 revert to the Trust, the maintenance of the institutions, so reverting will be the first charge on the income and corpus of the sinking fund if any.

Provided that in setting apart the sum referred to above the trustees will have regard to the institutions retained by the Government that may thereafter have to be taken over and maintained by the Trust subject to the provision of clause 45. The sum of Rupees four lacs is the maximum amount which will be taken out of the sinking fund at a time for all the institutions mentioned in para. 43 below.

15. If and so soon as any part of the sinking fund shall have been applied for any of the purposes mentioned in clause 13 or 14 hereof the same shall be made up again to the said sum of Rupees four lacs by setting aside such of the income of the Trust properties in the manner mentioned in clause 9 (i) hereof for forming a sinking fund until the sinking fund shall again amount to the said sum of Rupees four lacs.

16. The trustees, or any of them shall not be subject to any liability in the event of any of the investments forming part of the sinking or any other fund becoming depreciated in value, while the same shall be retained as aforesaid.

17. The trustees may appoint committees, hereinafter called executive committees, for the more effectual carrying out, management and supervision of any of the objects or charities mentioned in clause

9 (i) hereof. Provided that not more than one executive committee shall be appointed for any one of the objects aforementioned.

18. Each of the executive committees shall consist of five members, at least two of whom, shall be trustees elected by the trustees and the remaining vacancies, if any, shall be filled by persons other than trustees to be elected by the trustees. The chairman and the honorary secretary of the Trust shall be *ex-officio* members in addition to the five members aforementioned.

The chairman of the Trust shall be the chairman of every meeting of an executive committee at which he is present and, in his absence, the executive committee may elect any member as chairman for that meeting.

The honorary secretary shall be the secretary of each executive committee unless the trustees shall decide otherwise, and in such event the executive committee shall elect any member of the committee to be the secretary of the committee. Until the fresh appointment or election, the old office-bearers shall continue.

19. A meeting of each of the executive committees, to be called the annual meeting of that executive committee, shall ordinarily be held in the month of January in each year. The members of the executive committees, hereinafter called the executive members, may also hold such other meetings as they may, from time to time, consider necessary for the transaction of the business of their

respective committees.

20. At the annual meeting of each one of the executive committees one of the members of each of the executive committees shall retire from office.

21. The executive members to retire in every year shall be those, who have been longest in office since their last election, but between persons who became executive members on the same day, as to who should retire, shall be determined by lot.

22. A retiring executive member shall be eligible for re-election.

23. The trustees may, however, by a majority of seventy-five per cent of their number at any time determine that any member of the executive committee shall cease to be such a member and may appoint another person in his place, without assigning any reasons for such determination or being in any way liable therefor.

24. Any person appointed an executive member to fill any vacancy under clause 23 or clause 25 hereof, shall cease to hold office at the time at which the executive member in whose place he was appointed, would have ceased to hold office.

25. If and whenever any of the trustees or executive members dies or ceases to be a Hindu, or ceases to reside within the province of the Punjab for more than a year, or without any reasonable excuse fails to attend six consecutive meetings of the trustees or of the executive committee, as the case may be, or desires to be discharged, or in the opinion of at least nine trustees becomes unfit to act for any

reason that will not be mentioned, the trustees or continuing trustees as the case may be may appoint any person to be a trustee or executive member as the case may be, in his place. Provided that during his lifetime the Founder, Sir Ganga Ram, shall have full power to substitute any trustee or executive member without assigning any reason.

Any trustee who leaves India temporarily shall not be considered to have ceased to reside within the Punjab.

Any trustee or executive member may be paid out of pocket travelling expenses for attending the regularly called meetings of the Trust or the executive committee from their respective funds, as may be determined by the trustees from time to time.

26. No person shall be eligible as a trustee or an executive member who is not a Hindu, a sympathiser and supporter of the cause of the remarriage of Hindu widows, and who does not reside within the province of the Punjab.

27. The trustees may hand over to the executive committee concerned all, or any part of such sums as may be allocated for any trust under the provisions of clause 9 (i) and (ii).

28. The Trust Society or each of the executive committees, as the case may be, may appoint and at any time remove such clerks and servants as they may consider desirable.

29. The salaries of such clerks and servants as may be appointed by any executive committee shall be payable out of the sum allotted under clauses 9 (i)

and (ii) and 27 to the executive committee concerned.

30. Each of the executive committees shall keep or cause to be kept, true and proper accounts of all amounts entrusted to it, and shall return to the trustees any sum received by it from the trustees, remaining unspent for a space of three years after the same was paid to it.

31. A separate minute book shall be kept by the trustees, and by each of the executive committees. The minutes of their proceedings shall be recorded therein in their respective minute books.

32. The quorum necessary for the transaction of the business of any executive committee shall be three.

33. The trustees and executive members may, in addition to, or in lieu of the executive committee, or any of them delegate any of their powers to sub-committees, consisting of such members of their body as they may think fit ; any such sub-committee shall, in exercise of the powers so delegated, conform to any regulation from time to time prescribed by the trustees. But the trustees shall not delegate such powers as affect the property, the objects of the trust, or the appointment of trustees, or executive members.

34. The Founder shall be the first chairman of the Trust, and after his death the trustees shall at each annual meeting appoint from among the members of the Trust a chairman to hold office for the ensuing year. A retiring chairman shall be eligible for re-election to the office of the chairman

provided he continues to be a trustee.

35. The trustees shall, at their annual meeting appoint or elect from among their number an honorary secretary to hold office for the ensuing year. Any such retiring secretary if continuing a trustee, shall be eligible for re-election.

Until the election, the existing arrangements shall hold good.

36. In the absence of the chairman from any meeting, the trustees may appoint any one of their members to act as a chairman for that meeting in his absence.

37. On the occurrence of any vacancies among the trustees, or executive members each of the remaining trustees will be entitled to nominate one candidate for every vacancy. When more than one candidate has been nominated for any one vacancy, voting shall be by ballot. In other cases, voting may be by show of hands. In case, of equality of votes the chairman for the time being shall have a second, or casting vote. In case the number of trustees falls below nine, and no new trustee is elected within three months of the date of the vacancy, the senior-most trustee who is a lineal descendant of the Founder, may nominate a trustee to hold office till the next annual meeting.

Two of the trustees shall always be from amongst the lineal descendants of the Founder, and shall be elected by the trustees as hereinbefore provided.

38. There shall be no voting by proxy.

39. At their annual meeting the trustees shall

appoint or elect one or more auditors from amongst those who hold certificate from Government to act as auditors, under the Indian Companies Act.

40. The auditor or auditors shall, not later than a week before the annual general meeting of the trustees and in each year, audit and report upon all the accounts and books of the trustees and the executive committees and shall, at all other times if and when required by the trustees, audit and report upon any such accounts and books.

41. All the accounts and books of the trustees and of the executive committees shall be open to the inspection of the auditor or auditors at all reasonable times, and minute books of the executive committees shall be open to inspection by the trustees at any time.

42. All sums received by the trustees from any person or persons to whom scholarships have been awarded on the loan system as provided by clause 9 (i) (c) hercof, as repayment of their loans or otherwise, shall at the discretion of the trustees be allotted and spent solely for the objects mentioned in clause 9 (i) (c) or be allowed to fall into and be applied as part of the income of the Trust properties and allotted as provided by clause 9 (i) hereof.

43. For the purpose of the Punjab Government Notification No. 6743-G., dated 25th April 1922 issued by the Ministry of Education, and hereto annexed as Schedule C, the parties hereof of the second part, shall be Sir Ganga Ram Trust mentioned

in that notification.

44. The properties granted by the Founder to be vested in the Treasurer of Charitable Endowments Punjab for the purpose of—

(a) A Home with a Normal and Industrial School for Hindu and Sikh widows

(b) The Lady Maynard Industrial School for Hindu and Sikh Women and Girls and

(c) Any other institution which may hereafter be founded and vested in the said Treasurer of Charitable Endowments by the Founder, shall in case the Government do not carry on all or any of the said institutions revert to Sir Ganga Ram Trust.

45. In case the said properties revert to the said Sir Ganga Ram Trust under clause 44 above, the trustees shall hold the same in Trust for the purpose of continuing or re-establishing the institutions to which the properties so reverting belong in such portion or portions of the said property as the trustees may consider sufficient for the purposes of the institutions aforesaid, and the trustees shall have the power to let or sell the remaining portions. The proceeds from such sales and the amount diverted for the purpose from the sinking fund as provided in clause 14 shall be invested in such investments as are by law permitted to trustees with power to vary such investments for others of a like nature and the income thereof shall be exclusively devoted by the trustees for the purpose of the said institutions.

46. Subject to the provisions of these presents,

the trustees shall as soon as possible get the Trust registered under the Societies' Registration Act XXI of 1860 or under any other Act amending, repealing or re-enacting the same.

47. All moneys with the trustees or executive committees except imprest sums to the extent determined by the trustees shall be invested by the trustees or the executive committees in such banks and securities in such manner as may be approved of by the trustees. The trustees may from time to time purchase immovable property with the surplus funds in their hands. But during his lifetime the Founder, Sir Ganga Ram, will have full discretion in the matter, and after his death the trustees will be guided by the provisions herein provided.

48. The quorum necessary for the transaction of any ordinary business of the trustees at any ordinary meeting shall be five, when the number of trustees is eleven ; and three, if the number of the trustees is less than eleven. The quorum for the annual meeting, or for the election of any trustee, or an executive member, or for the passing of the budget, or making an investment, shall be seven when the number of trustees is eleven ; and five when the number of trustees is less than eleven. The executive committees shall pass their own respective budgets subject, however, to the approval of the trustees in any ordinary meeting.

49. If after fifty years the trustees consider and by a majority of seventy-five per cent decide that the practice of widow remarriage has become as

common amongst all the classes of Hindus in India as in other Indian communities, and that it is therefore no longer necessary or advisable to promote the cause of, or help in the solemnization of Hindu widow remarriages, the trustees shall thereafter spend the amount reserved by clause 9 (i) (a) in the establishment of homes for, or in providing relief to, or in otherwise helping and improving the condition of Hindu widows.

50. Except as to the name, and aims and objects of the Trust, subject to clause 49 above, the trustees shall have the power by majority of seventy-five per cent of their total number to change, modify, or amend any of the rules, regulations, and provisions hereinbefore contained, with regard to the conduct and management of the Trust, and with regard to any matters in respect of which any power is hereby conferred or duty imposed.

51. The Founder, his descendents, or any other person may assign, or convey any property, or properties to the trustees for any of the objects of the Trust, or any other objects which may not be conflicting with or contrary to the objects of the Trust.

52. The trustees subject to clause 47 hereof may for valid reasons and after obtaining the permission of the High Court, sell or mortgage any immovable property of the Trust and invest the proceeds of the same in the purchase or first mortgage of immovable properties or in such other investments as are by law permitted to trustees.

Provided that the above restriction does not

apply to shares or other investments except those in respect of immovable property. The trustees may by a majority of three-fourth of their total number dispose of such investments or movable property, and invest the proceeds in such manner as they think fit.

Provided also that the above restriction does not apply to shares or other investments. The trustees are empowered, in case of need, to meet the budgeted demand to pledge securities, Government bonds, and all other movable property to banks and borrow money against the security of such investments or movable property. This overdraft should be repaid before incurring any further liabilities.

53. All accounts with the banks shall be opened in the name of Sir Ganga Ram Trust Society, and shall be operated by cheques or otherwise over the signature of both the honorary secretary and the honorary treasurer, provided that in case of banks which do not recognise trusts or in case of shares, etc., the trustees may authorise one or more members of the Trust to operate the same.

Trustees.

(Sd.) GANGA RAM.
 " B. J. SAHNI.
 " BALAK RAM.
 " SEWAK RAM.
 " BADRI DAS.
 " RANGI LAL.
 " NAND LAL.
 " A. B. ARORA.
 " SUNDAR SINGH MAJITHIA.
 " BAHADUR CHAND.
 " LAJPAT RAI SAHNI.

Founder.

(Sd.) GANGA RAM.

